

Ms. Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549

June 16, 2022

**Re: The Enhancement and Standardization of Climate-Related Disclosure for Investors
Attention: 87 FR 21334; Docket ID: SEC-2022-06342; File No. S7-10-22**

Dear Ms. Countryman,

Americans for Financial Reform Education Fund, Public Citizen, the Sierra Club, the Ocean Conservancy, and the Sunrise Project appreciate the opportunity to comment on the above-referenced Proposed Rule (the “Proposal”) from the Securities and Exchange Commission (the “SEC” or the “Commission”) to require mandatory, standardized climate-related disclosures by public companies. In general, the proposed disclosures will provide the information that investors and other market participants need for accurate asset valuation and to assess the financial risks that climate change poses to registrants. Mandating standardized disclosures to address this significant developing source of risk falls squarely within the Commission’s authority and responsibility.

We thank the SEC for issuing this Proposal to address climate-related financial risk to investors and the market through mandatory climate disclosures, and we urge you to strengthen and finalize the rule quickly and enforce it rigorously. The SEC has both the authority and the responsibility to mandate these disclosures so that all investors and market participants have comparable, freely available information on some of the most significant risks to individual firms, portfolios, and markets—risks related to the climate crisis and the clean-energy transition.

Please find below our responses to the Commission’s Proposal.

Sincerely,

Americans for Financial Reform Education Fund
Public Citizen
Sierra Club
Ocean Conservancy
The Sunrise Project

cc: The Honorable Gary Gensler, Chair
The Honorable Allison Herren Lee, Commissioner
The Honorable Hester M. Peirce, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner

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Introduction

1. Investors need information about how climate change and the transition to a decarbonized economy affect a public company's financial condition and long-term business outlook.

The proposed climate-related disclosures provide information about how registrants are navigating risks and opportunities from physical impacts of climate change and the energy transition. Both sources of risk can have material effects on a company's immediate financial condition and long-term business outlook, as well as valuation of their securities. Successful financial and business outcomes for investors and other market participants will hinge on the ability of all registrants to appropriately assess and react to these risks.

Physical impacts refer to the acute and chronic threats posed by severe weather events and other natural conditions affected by rising global temperatures. These risks are not looming over some distant horizon; they are already big enough to pose a threat to a company's very existence. In 2019, the California electric utility Pacific Gas & Electric (PG&E) filed for bankruptcy protection after accumulating more than \$30 billion in liability for wildfires in 2017 and 2018.¹ The wildfires' rapid and destructive spread was exacerbated by climate-driven drought conditions. Though PG&E has since emerged from bankruptcy, its stock is worth only a fraction of what it traded at before those wildfires, costing shareholders billions. In addition to causing losses to investors, PG&E's failure to attend to climate risk led to extensive costs borne by creditors, vendors, and other counterparties in pressing and protecting their claims throughout the bankruptcy process. As the effects of climate change intensify, these risks will only grow, affecting whole sectors and the U.S. economy in ways that may rival or exceed any other source of financial risk.

Transition activities refer to the social, political, economic, and technological changes arising from the global transition to a decarbonized economy that is currently underway. It is undeniable that these changes are transforming the economy in profound ways. For instance, the International Energy Association (IEA) predicts that the number of electric vehicles (EVs) on the road will increase by a factor of fifteen to twenty in the next decade.² Already, the world's most valuable automaker by market capitalization, Tesla, produces only EVs, reflecting a strong expectation from investors about the future direction of that market. This transformation will affect the business of not only auto manufacturers, but also a vast, interconnected network of miners, parts suppliers, and fleet operators. Other sectors similarly affected will include oil and gas extraction and production, utility power generation, agriculture, aviation, and heavy

¹ Penn, Ivan. 2020. "PG&E, Troubled California Utility, Emerges From Bankruptcy." *New York Times*, July 1, 2020, sec. Business. <https://www.nytimes.com/2020/07/01/business/energy-environment/pge-bankruptcy-ends.html>.

² International Energy Association (IEA). 2021. *Global EV Outlook 2021: Accelerating Ambitions Despite the Pandemic*. Paris: IEA. <https://www.iea.org/reports/global-ev-outlook-2021>.

industries such as steel, chemicals, and cement.³ For firms in these sectors or with significant exposure to these sectors, navigating the transition will be among the most important, if not the most important, considerations for their business strategy.

The collective failure of firms to adapt to climate-related risks has created market-wide inefficiencies and near ubiquitous mispricing.⁴ As much as 93 percent of the U.S. equities market is exposed to climate-related risk according to some estimates.⁵ Globally, one study found that \$1.4 trillion in assets may become worthless as a result of the transition.⁶ Much of this exposure comes from carbon-intensive sectors and firms that are not taking what the credit rating agency Moody's describes as "early action" to address climate-related financial risks. As Moody's explains, if firms take "delayed action" it could increase default risks for individual firms and increase the likelihood of value destruction throughout the market.⁷ This value destruction arises in part out of the present-day misvaluation of assets that are unlikely to provide their projected economic return.

The growing consideration of climate change and the energy transition is reshaping capital markets in a way that all investors and registrants must take into account. According to one survey by PricewaterhouseCoopers of investors representing more than \$14 trillion in assets under management, 80 percent took environmental, social, and governance (ESG) factors into account in making investment decisions.⁸ Shareholder proposals and even proxy fights tied to the transition have reached record levels of support.⁹ Firms that can successfully accommodate investor ESG expectations will have access to a larger pool of investment funds, and potentially a lower cost of capital, than firms that cannot. Indeed, the widespread phenomenon of "greenwashing" via false or misleading claims about climate progress may reflect a belief by

³ Krishnan, Mekala. 2022. "The Economic Transformation: What Would Change in the Net-Zero Transition." McKinsey Sustainability, January 25, 2022. <https://www.mckinsey.com/business-functions/sustainability/our-insights/the-economic-transformation-what-would-change-in-the-net-zero-transition>.

⁴ Rhodium Group. 2019. "Clear, Present and Underpriced: The Physical Risks of Climate Change." Rhodium Group, April 3, 2019. <https://rhg.com/research/physical-risks-climate-blackrock/>; O'Donnell, Grace. 2021. "ESG: The Majority of Climate Risk Repricing 'Is Yet to Occur,' Strategist Says." *Yahoo News*, December 9, 2021, sec. Finance. <https://news.yahoo.com/climate-risk-repricing-to-occur-strategist-131339540.html>; O'Donnell, Grace. 2021. "Only 6% of Financial Firms Think Climate Risk Is Fully Priced In: GARP Survey." *Yahoo News*, October 6, 2021, sec. Finance. <https://finance.yahoo.com/news/financial-firms-climate-risk-garp-survey-155453199.html>.

⁵ Herren Lee, Allison. 2020. "Big Business's Undisclosed Climate Crisis Plans." *New York Times*, September 27, 2020, sec. Opinion. <https://www.nytimes.com/2020/09/27/opinion/climate-change-us-companies.html>.

⁶ Semieniuk, Gregor, et al. 2022. "Stranded Fossil-Fuel Assets Translate to Major Losses for Investors in Advanced Economies." *Nature Climate Change*. <https://www.nature.com/articles/s41558-022-01356-y>.

⁷ Moody's On Climate. N.d. *Ready or Not? Sector Performance in a Zero-Carbon World*. Moody's. https://www.moody.com/sites/products/ProductAttachments/Moodys_ReadyOrNot.pdf.

⁸ PricewaterhouseCoopers (PwC). 2021. "PwC's 2021 Global Investor Survey." PwC. Accessed May 9, 2022. <https://www.pwc.com/gx/en/services/audit-assurance/corporate-reporting/2021-esg-investor-survey.html>.

⁹ Climate Action 100+. 2021. "As Climate Risks Skyrocket, Largest Asset Managers Vote for More Climate-Related Shareholder Proposals, Tipping Support to Record Levels in 2021." Climate Action 100+, December 6, 2021. <https://www.climateaction100.org/news/as-climate-risks-skyrocket-largest-asset-managers-vote-for-more-climate-related-shareholder-proposals-tipping-support-to-record-levels-in-2021/>.

companies that investors and other market participants will allocate their money based on these considerations. Even investors with no ESG orientation who may have no problem financing a company without a credible plan for reducing emissions might think twice if the lack of such a plan increases the risks of adverse actions by investors and financial institutions and jeopardizes returns.

In order for investors to protect their investments and for all market participants to be comfortable investing in the companies that they believe are positioning themselves to survive and thrive in these changing markets, investors need access to decision-useful, comparable, and accurate information. To make this assessment, investors and other market participants need to understand how climate change and the transition are affecting a company's financial performance and condition today; how management anticipates those effects manifesting over short, medium, and long time horizons; and whether and how management intends to address those risks. To understand their options and develop appropriate benchmarks, investors need to have this information in a format that allows for easy comparison of companies across and within sectors and geographies. And they need to be comfortable that the information they are getting is as reliable as other financial information provided by a company, particularly given the proliferation of greenwashing, including deceptive emissions reductions commitments, made by firms painting misleading pictures of their preparedness for climate risks. Without these safeguards, investment and many other business decisions are subject to an unacceptable level of risk from missing, misleading, or even fraudulent information, and markets will not fairly and efficiently adapt to the ongoing climate-related transformations in the economy.

2. Existing forms of climate-related disclosure are inadequate to meet the needs of investors and other market participants.

The Commission has long recognized the need for disclosure of climate-related impacts on a registrant's business and financial performance. In 2010, it issued guidance highlighting locations in the annual statements where a registrant could be required to provide material climate-related disclosures, as well as the circumstances under which such disclosure obligations could be triggered.¹⁰ However, this guidance allows registrants to make climate-related and sustainability proclamations in their sustainability reports that are inconsistent with their financial statements.¹¹ And because the guidance allows firms to report only those climate risks they assess to be material, many firms provide only vague, boilerplate disclosures or do not

¹⁰ Securities and Exchange Commission (SEC). 2010. "Commission Guidance Regarding Disclosure Related to Climate Change." SEC. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>.

¹¹ See Letter to SEC from Fiona Reynolds, Chief Executive Officer, Principles for Responsible Investment, November 9, 2021, available at <https://www.sec.gov/comments/climate-disclosure/cll12-9369735-262006.pdf>.

address climate risk at all.¹² The Commission should clarify that even before the new disclosures rules come into effect, climate-related disclosures should already be made as part of the Management Discussion & Analysis, description of business, and risk factors sections within Form 10-K.

A range of voluntary standards have been developed to meet the demand for credible, comparable information. But the proliferation of differing frameworks has increased complexities and costs for registrants, data aggregators, and data users. Although these standards incorporate some forward-looking risk-management and governance disclosures that many stakeholders are seeking, both investors and registrants complain that the information provided under voluntary frameworks is not adequate for a variety of reasons, including the lack of comparability across frameworks and the omission of material information from certain frameworks, which create incentives for issuers to “shop” for the framework that casts them in the best light.¹³ In the absence of a single set of comparable climate disclosures, investors and other market participants must either expend significant time and resources to find relevant and reliable data, or act without adequate confidence in their conclusions.

For these reasons, a global consensus has emerged that there is a need for mandatory disclosure requirements in major capital markets around the world. In 2020, the Group of 30 (G30) urged all governments to take action to codify requirements for climate-risk disclosure. According to the G30, “While there is increasing momentum behind voluntary disclosure, there are limits to what decentralized private sector action can achieve.”¹⁴ The G30 recommended that all governments set ambitious timelines for mandatory climate-risk disclosure requirements to build on the helpful but insufficient voluntary progress to date. In 2021, this recommendation was reinforced by G7 finance ministers and central bank governors who jointly agreed to mandate the Task Force on Climate-related Financial Disclosures (TCFD)-aligned climate-related disclosures

¹² Reiners, Lee, and Charlie Wowk. 2020. *Climate Risk Disclosures & Practices: Highlighting the Need for a Standardized Regulatory Disclosure Framework to Weather the Impacts of Climate Change on Financial Markets*. Durham, NC: Climate Risk Disclosure Lab, Global Financial Markets Center, Duke University School of Law. <https://climatedisclosurelab.duke.edu/wp-content/uploads/2020/10/Climate-Risk-Disclosures-and-Practices.pdf>.

¹³ See, e.g., Task Force on Climate-related Financial Disclosures (TCFD). 2020. *Task Force on Climate-Related Financial Disclosures: 2020 Status Report*. TCFD. https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf.

¹⁴ Group of Thirty’s Steering Committee and Working Group on Climate Change and Finance. 2020. *Mainstreaming the Transition to a Net-Zero Economy*. Washington, DC: Group of Thirty. https://group30.org/images/uploads/publications/G30_Mainstreaming_the_Transition_to_a_Net-Zero_Economy.pdf, at 29.

in all G7 countries.¹⁵ Today, many governments are working toward mandatory disclosure frameworks, including those in the United Kingdom, the European Union, and New Zealand.¹⁶

Critics imply that by engaging in activity around climate-related disclosure, the SEC is sending a “signal” to investors to starve carbon-intensive industries of capital.¹⁷ But the decades-long timeline of voluntary climate-related disclosure standards, investor initiatives, and market developments shows that the SEC is responding to a well-defined and extensively documented market failure to provide comparable, decision-useful information. The vast majority of institutional and retail investors support this SEC action and will use the resultant data to inform their investment decisions. In fact, this action is long overdue, delayed far beyond the time when climate was considered a specialty issue.¹⁸

Of particular concern is that companies are failing to disclose material climate-related impacts on their financial statements. As the Commission has recognized, both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have confirmed that climate-related risks must be treated in accordance with the existing disclosure standards.¹⁹ That means the risks must be taken into account in developing assumptions, any material assumptions must be disclosed, and statements made elsewhere in a registrant’s annual filings must be consistent with those assumptions. A recent study by Carbon Tracker has concluded that even for firms where climate-related risk is unquestionably material—such as oil and gas companies—these requirements for financial statement disclosures are likely not being properly followed, and auditors have not addressed this oversight.²⁰ This is a particularly serious

¹⁵ UK Government. 2021. “G7 Finance Ministers and Central Bank Governors Communiqué.” UK Government, June 5, 2021.

<https://www.gov.uk/government/publications/g7-finance-ministers-meeting-june-2021-communication/g7-finance-ministers-and-central-bank-governors-communication>.

¹⁶ New Zealand Ministry for the Environment. 2021. “Mandatory Climate-Related Disclosures.” Updated December 1, 2021.

<https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/>;

Department for Business, Energy & Industrial Strategy, HM Treasury, John Glen MP, and The Rt Hon Greg Hands MP. 2021. “UK To Enshrine Mandatory Climate Disclosures for Largest Companies in Law.” UK Government. Press release, October 29, 2021.

<https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law>;

Council of the European Union. 2022. “Council Adopts Its Position on the Corporate Sustainability Reporting Directive (CSRD).” Press release, February 24, 2022.

<https://www.consilium.europa.eu/en/press/press-releases/2022/02/24/council-adopts-position-on-the-corporate-sustainability-reporting-directive-csrd/>.

¹⁷ See Letter from Senator Joe Manchin to Chairman of the US Securities and Exchange Commission Gary Gensler, April 4, 2022, at <https://www.manchin.senate.gov/imo/media/doc/SEC%20ClimateDisclosure%20Letter.pdf?cb>.

¹⁸ Fink, Larry. 2022. “Larry Fink’s 2022 Letter to CEOs: The Power of Capitalism.” BlackRock.

<https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>.

¹⁹ Proposal at 21362.

²⁰ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.

<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

issue because many firms are making public commitments to achieve emissions reduction goals without investing in the business transformation necessary to meet those goals.²¹

Some criticism of the Proposal further demonstrates the need for mandatory disclosure. Critics have said that mandating climate-related disclosure of the type proposed in this rule will lead to a significant reallocation of resources by investors away from those industries.²² The implication of those statements is that firms are currently not disclosing information that would affect the behavior of a large swathe of the investors. That is the heart of materiality.²³ If these disclosures are not being made today, it demonstrates the inadequacy of the current voluntary reporting regime, and the need for more standardized, mandatory disclosure.

The Commission has many avenues to address the need for better disclosure under existing law, including stepped-up enforcement, issuing a Staff Accounting Bulletin (SAB) or similar authoritative communication that identifies issues, and more-detailed interpretive guidance clarifying its expectations. Indeed, it should choose to pursue some of these in addition to finalizing the Proposal. However, with the magnitude of the economic changes caused by climate change, the difficulties investors have had in achieving comparable disclosure via voluntary frameworks, and the strong opinions elucidated in responses to the RFI, a notice-and-comment rulemaking developing a standardized disclosure format is appropriate.²⁴ This is consistent with previous approaches taken to mandatory disclosure of specified risks with significant potential financial impacts, even if not viewed as material for every registrant, such as environmental litigation and compliance costs.²⁵

3. The Commission is squarely within its authority to promulgate the disclosures required in the Proposal.

The Proposal's requirements to disclose decision-useful information about a registrant's financial condition, business plan, and value chain fit squarely within the Commission's authority. The Commission may make or amend rules or regulations governing the form in which required information shall be set forth, the items or details to be shown in financial statements, and the methods to be followed in the preparation of accounts, the valuation of assets and liabilities, and other accounting or financial decisions.²⁶ In determining whether an action is necessary or in the

²¹ Bricker, Wes. 2022. "ESG Controller: The Position You Didn't Know You Needed." Financial Executives International (FEI), April 12, 2022. <https://www.financialexecutives.org/FEI-Daily/April-2022/ESG-Controller-The-Position-You-Didnt-t-Know-You-N.aspx>.

²² *Ibid.*

²³ *Basic, Inc. v. Levinson*, 485 U.S. 224 (1988), at <https://supreme.justia.com/cases/federal/us/485/224/>.

²⁴ Securities and Exchange Commission (SEC). 2010. "Public Input Welcomed on Climate Change Disclosures." SEC. <https://www.sec.gov/news/public-statement/lee-climate-change-disclosures>

²⁵ Securities and Exchange Commission (SEC). 2010. "Commission Guidance Regarding Disclosure Related to Climate Change." SEC. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>, at 13.

²⁶ See e.g., 15 U.S.C. 77s.

public interest, the Commission is required to consider the protection of investors and whether the action will promote efficiency, competition, and capital formation.²⁷ As discussed above and extensively through this comment, investors and other market participants currently lack the information they need for accurate asset valuation and to assess potentially significant climate-related impacts on registrants. This Proposal would fill many of these gaps, protecting investors and improving the efficiency and competition in markets, and thus is within the Commission’s authority and responsibility.

Critically, the gaps that the proposed rule fills relate to reporting of credible financial data. The Proposal is based in part on the financially relevant disclosure framework developed by TCFD, whose members are financial data users and preparers. These members include major asset managers like BlackRock, State Street, and Vanguard; insurance companies; industrial firms; rating agencies; and accounting firms. These members understand that investors “can only price the risks that they are aware of,” and today, 93 percent of institutional investors say they “view climate change as an investment risk that has yet to be priced in by all the key financial markets globally.”²⁸ The Commission’s response to investor needs for disclosure of information that has not been adequately priced is grounded in widely accepted disclosure frameworks, and its exercise of authority is properly situated in its long-standing statutory mandate to protect investors and the public interest.

Regulating disclosure on an issue for which the Commission lacks primary regulatory jurisdiction is firmly within the agency’s authority. The Commission is not proposing to regulate emissions or to tell registrants how to address the climate-related impacts and transition risks they face; it is requiring them to disclose information on these topics to investors. The SEC has decades-long experience handling disclosures on technical topics. Indeed, without ever claiming the mantle of an energy regulator, the Commission drew up a specialized disclosure framework for oil and gas extraction activities and has maintained it since the 1970s.²⁹ Updating disclosure requirements as the economy and markets evolve is a core part of the Commission’s mission. It has leveraged outside expertise, much like it does here, to develop financially relevant disclosure requirements for environmental compliance,³⁰ cybersecurity,³¹ and intellectual property.³² Climate-related impacts and the energy transition are among the biggest sources of financial risk in both the near-term and long-term. Given the demand from investors for standardized

²⁷ See e.g., 15 U.S.C. 77b.

²⁸ Condon, Madison, Sarah Ladin, Jack Lienke, Michael Panfil, and Alexander Song. 2021. “Mandating Disclosure of Climate-Related Financial Risk.” *New York University Journal of Legislation and Public Policy* (September). <https://ssrn.com/abstract=3931076>.

²⁹ 17 C.F.R. 210.4-10.

³⁰ 17 CFR 229.101(c)(2)(i).

³¹ Securities and Exchange Commission (SEC). 2018. “Commission Statement and Guidance on Public Company Cybersecurity Disclosures.” SEC, February 26, 2018. <https://www.sec.gov/rules/interp/2018/33-10459.pdf>.

³² Securities and Exchange Commission (SEC). 2019. “Intellectual Property and Technology Risks Associated with International Business Operations.” SEC, December 19, 2019. <https://www.sec.gov/corpfin/risks-technology-intellectual-property-international-business-operations>.

climate-related information, and the challenges in getting this information from existing disclosure frameworks and regimes discussed in sections 1 and 2 above, it would be an abdication of the Commission’s duty if it did not develop climate-related disclosures.

The specific disclosures in the Proposal are also firmly within the Commission’s authority to require. The Commission may mandate disclosure of “such other information, and ... such other documents, as the Commission by rules or regulation requires as being necessary or appropriate ... for the protection of investors.”³³ As discussed below, the Proposal adequately justifies the necessity and appropriateness of each disclosure requirement for the protection of investors. As noted by Commissioner Allison Herren Lee, these justifications do not require a specific finding of materiality by the Commission for every registrant covered by the requirement.³⁴ The Commission’s statutory rulemaking authority to require disclosure does not mention “materiality” as a factor, reviewing courts have never subjected the Commission’s disclosure requirements to a materiality standard, and the Commission has required disclosure on many topics, such as executive compensation, share buybacks, and environmental proceedings, without regard to specific findings of materiality for each line item or registrant. Similarly, the specific disclosures required by the Proposal meet the needs of investors and other market participants to understand the effect of climate-related risk on registrants and markets, even if they are not material in every instance, and are thus well within the Commission’s authority to require.

Further, the Commission has a responsibility to require these disclosures for investors, market participants, and other stakeholders that would use the information for their benefit. Many organizations would use and benefit from the proposed disclosures to safeguard their own finances, publish research, educate and protect their members and other stakeholders (including investors), and promote policies to ensure fair and efficient markets with adequate protections for all participants. The standardized, high-quality information from the proposed disclosures would be impossible to access by other means, and organizations would thus be unable to benefit from it for more accurate valuation of assets, better education and protection of members and other stakeholders, and in their research and policy development. Failure to strengthen and finalize the proposed disclosures in the ways identified in this letter, and to maintain them, would lower the quality, comparability, and useability of climate-related disclosures within the U.S. capital markets.

4. In general, the Proposal’s requirements meet the needs that investors and other market participants have for standardized climate-related information that allows them to assess a registrant’s financial condition.

³³ 15 U.S.C. 77j.

³⁴ Lee, Allison Herren. “Living in a Material World: Myths and Misconceptions about ‘Materiality.’” Keynote Remarks, 2021 EST Disclosure Priorities Event, Washington, DC, May 24, 2021. US Securities and Exchange Commission. <https://www.sec.gov/news/speech/lee-living-material-world-052421>.

The disclosures required by the Proposal appropriately focus on generating the information that investors and other market participants need to understand how climate-related impacts and transition activities will affect a registrant's financial condition and business operations.

The Proposal would add a "climate-related disclosures" section to Part 210 of the SEC's rules, which governs disclosure of the financial statements. This addition appropriately recognizes that what investors and other market participants need most is reliable information about how climate change and transition activities affect the current and future financial condition of a registrant. By requiring standardized disclosure of both climate-related assumptions and estimates, as well as financial statement and expenditure metrics, the Proposal ensures that investors will have a baseline of audited financial information they can use to assess qualitative climate disclosures.

The Proposal provides another source of critical quantitative information by requiring disclosure of a registrant's greenhouse gas (GHG) emissions. Disclosure of a registrant's direct emissions (Scope 1) and emissions from electricity and heat (Scope 2) provides context for certain important financial estimates and assumptions, particularly related to the value of long-lived assets and the sustainability of certain operating costs. Disclosure of emissions from entities in a registrant's value chain (Scope 3) are perhaps even more critical, as they provide information about potential transition risks to a registrant's supply chain or revenue base and about opportunities to partner with customers and suppliers on mitigating this risk. Given the implications of this information for financial risk, it is also appropriate that the Commission requires assurance of emissions disclosures in a similar manner to the consolidated financial statements.

Disclosure of qualitative information as proposed by the Commission provides essential context for the financial statements. Information about how registrants incorporate climate-related factors into their governance, strategy, business model, outlook, and risk management helps investors understand how a registrant is navigating climate-related impacts and transition activities. By including this information in the same reports as quantitative, assured disclosures, the Proposal allows auditors, investors, and other market participants to assess the logical resonance of all the information provided by a registrant.

Finally, the Proposal acknowledges the financial impact that climate targets and goals can have on a registrant, and gives investors and other market participants the information they need to assess whether a registrant is on track to meet its own goals. This requirement protects investors from misleading statements that falsely appear to inflate progress and helps them in the accurate valuation of assets, and to allocate capital and engage with firms in accordance with their investment thesis.

- 5. The Proposal could better meet the needs of investors and other market participants if the Commission added disclosure requirements around environmental and racial justice and community impacts, strengthened requirements around Scope 3 disclosures, and created a more abbreviated timeline for phasing in disclosure requirements.***

Although the Proposal creates a framework for climate-related disclosures that will strengthen investor protections and improve orderly, fair, and efficient allocation of capital, there are gaps in the rule that prevent investors from having the comprehensive information they need.

Environmental Justice and Community Impacts

Investors need to understand how companies assess, manage, and mitigate impacts on communities that stem from regular business operations, climate mitigation efforts, and transition activities. These include impacts caused by land use change and deforestation; infringement of land rights; natural resource extraction; disruption to local economies; air and water pollution; harm to public health and safety; and worker dislocation. Companies engaged in harmful activities that exacerbate climate change and racial and environmental injustices are increasingly exposed to operational, reputational, and liability risks that carry a heavy financial burden.

Disclosure of All Scope 3 Emissions by All Registrants

The proposal's omission of a mandatory Scope 3 disclosure requirement is also troubling. The majority of most companies' GHG emissions are Scope 3, making this scope a major source of transition risk. As discussed above, the principles-based, materiality-centered approach in the 2010 Guidance has failed to elicit sufficient disclosure of climate-related risks. The Commission should learn from this failure and abandon its proposal to allow registrants to make their own determinations of whether Scope 3 emissions are material and therefore subject to disclosure. Instead, the Commission should require disclosure of all Scope 3 emissions by all registrants and provide a lengthier timeline for small reporting companies compared to other types of filers.

Reasonable Assurance of Scope 3 Disclosures

Given that they represent a major source of transition risk, investors need reliable information on Scope 3 emissions at least as much as they need reliable Scope 1 and 2 emissions data. The Commission should require that registrants provide attestations from independent providers with reasonable assurance regarding Scope 3 disclosures on the same timeline as required for Scope 1 and 2 disclosures, based on the type of filer, with an exception for SRCs, as outlined below.

Timelines for Disclosures

The timelines for disclosure with limited and reasonable assurance should be as follows. *Stars (*) represent timelines that have been accelerated or new requirements, compared to the Proposal.*

Large Accelerated Filers	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2023	FY 2023	FY 2023*
<i>Limited Assurance</i>	–	FY 2024	FY 2024*
<i>Reasonable Assurance</i>	–	FY 2025*	FY 2025*

Accelerated Filers and Non-Accelerated Filers	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2024	FY 2024	FY 2024*
<i>Limited Assurance</i>	–	FY 2025	FY 2025*
<i>Reasonable Assurance</i>	–	FY 2026*	FY 2026*

Small Reporting Companies (SRCs)	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2025	FY 2025	FY 2026*
<i>Limited Assurance</i>	–	FY 2026*	FY 2027*
<i>Reasonable Assurance</i>	–	FY 2027*	FY 2028*

In the remainder of this Comment, we respond to the ways that the overall scheme and specific disclosure requirements in the Proposal are necessary and appropriate for protecting investors and promoting fair and efficient capital markets and capital formation, in line with the Commission’s statutory mandate. We also provide recommendations for additions or changes that would further advance the Commission’s purpose of providing investors with sufficient

information to assess the financial implications of climate-related impacts and transition activities on registrants and markets.

Responses to Questions Posed by the Commission (in numerical order)

1. Should we add a new subpart to Regulation S-K and a new article to Regulation S-X that would require a registrant to disclose certain climate-related information, as proposed? Would including the climate-related disclosure in Regulation S-K and Regulation S-X facilitate the presentation of climate information as part of a registrant's regular business reporting? Should we instead place the climate-related disclosure requirements in a new regulation or report? Are there certain proposed provisions, such as GHG emissions disclosure requirements, that would be more appropriate under Regulation S-X than Regulation S-K?

The Commission should include climate-related disclosure in Regulation S-K and Regulation S-X, as proposed.

This approach would appropriately facilitate the presentation of climate information as part of a registrant's regular business reporting. This is the most fitting location for climate-related disclosures given that the proposed disclosures include information that aligns well with and would enhance the current reporting requirements under Regulation S-K and Regulation S-X. The Commission correctly asserts in the Proposal that “the required disclosure is fundamental to investors’ understanding the nature of a registrant’s business and its operating prospects and financial performance, and therefore, should be presented together with other disclosure about the registrant’s business and its financial condition.”³⁵

Locating climate-related disclosure requirements in Regulation S-K and Regulation S-X also fits given the fundamental purposes of Form 10-K and Form 10-Q disclosures. According to the Commission, disclosures in Form 10-K and Form 10-Q offer “a detailed picture of a company’s business, the risks it faces, and the operating and financial results for the fiscal year or quarter, as applicable.”³⁶ The climate-related disclosures proposed fit squarely within these categories and would provide important contextual information that is critical to understanding a company’s financial statements and the quality of earnings presented.

This treatment is consistent with a recommendation from the the Task Force on Climate-related Financial Disclosures (TCFD) that climate-related financial disclosures be made in “mainstream (i.e., public) annual financial filings” to “help ensure that appropriate controls govern the production and disclosure of the required information.”³⁷ It also aligns with the International

³⁵ Proposal at 21348.

³⁶ Securities and Exchange Commission (SEC). 2021. “How to Read a 10-K/10-Q.” Fast Answers. Modified January 26, 2021. <https://www.sec.gov/fast-answers/answersreada10khtm.html>.

³⁷ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD. <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at iv.

Accounting Standards Board's (IASB) draft Climate Standard, which addresses the need to centrally locate climate-related disclosures within a registrant's business filings. According to the draft standard, "In assessing an entity's financial and operating results and future cash flows, users of general purpose financial reporting want insight into the governance, risk management and strategic context in which such results are derived."³⁸ This demonstrates recognition by accounting standards setters that climate change is a core part of the context that investors and other market participants take into account when assessing a registrant's current financial condition as well as its projected performance into the future.

To properly assess this risk, investors need to understand how climate change actually affects financial performance, and how it affects financial estimates and assumptions about future performance. Because information about financial performance is located in the disclosures governed by Regulation S-X, it is appropriate to locate information about the financial impacts of climate change and the energy transition in those disclosures as well. Climate-related risk may affect numerous parts of a registrant's financial statement and must be presented in context with other financial information to give investors full visibility into the effects it may have on the registrant's business and financial condition.

Requiring the disclosure of climate-related information in a new regulation or report would incorrectly signal that climate-related information is not intimately connected to other core business and financial information and is not necessary in understanding a registrant's financial condition.

GHG emissions should be moved into Regulation S-X because they are a critical financial input for assessing how the energy transition will affect a firm's financial condition. Investors and other market participants need to understand how assumptions and estimates about a firm's asset values, inventory, and ability to function are reliant on certain types of emissions. The oil and gas sector provides a well-documented example of how emissions interact with financial assumptions: embedded emissions affect the carrying cost of long-lived assets, as well as the valuation of reserves.³⁹ Investors need to be able to understand the relationship that exists between the financial statements and emissions in this industry and many others. Putting emissions disclosure in Regulation S-X would better reflect their importance to understanding how a registrant's financial statements are sensitive to climate risks, and it would also subject this critically relevant information to the same verification as other critical risk information disclosed in the financial statements.

³⁸ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 5.

³⁹ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.
<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

Even if a registrant’s emissions are not a material input (e.g., emissions may be zero, easy to decrease, or assumed negligible) that is itself material information about which the SEC can require disclosure.⁴⁰ Verifying *any* particular level of emissions provides critical data about the risks that a firm faces, and gives investors and market participants confidence about the information they are receiving. Investors should not be left wondering whether a firm has appropriately calculated and factored emissions estimates into its business when that information could be subject to standardized verification.

If the Commission elects to keep emissions disclosure in Regulation S-K, it should recognize that this information will still be important for assessing financial statement data in Regulation S-X. To that end, this disclosure should be subject to reasonable assurance, to give investors a similar level of confidence in the information as if it were located in Regulation S-X.

2. If adopted, how will investors utilize the disclosures contemplated in this release to assess climate-related risks? How will investors use the information to assess the physical effects and related financial impacts from climate-related events? How will investors use the information to assess risks associated with a transition to a lower-carbon economy?

In issuing this Proposal, the Commission is taking an appropriate, critical step in responding to investor requests for more comprehensive, standardized climate disclosure. Investors recognize that climate-related physical and transition risks present foreseeable risks to nearly every sector of the economy. By detailing the requirements with sufficient specificity and requiring verification by designated attestation to ensure accuracy and credibility, the Proposal will bring much-needed transparency, clarity, and reliability to an area of disclosures that investors need for investment decision-making.

Investors need mandatory climate-related disclosures to reliably assess a registrant’s climate-related risk exposure.

The Proposal addresses the desire of investors with trillions of dollars in assets under management for a disclosure regime that provides a framework for disclosing comparable and verified climate-related information that is useful for assessing a registrant’s current operations and future performance. Over the last decade, many voluntary disclosure frameworks and data analytics tools have emerged to assist companies, investors, and other interested stakeholders

⁴⁰ See, e.g., International Financial Reporting Standards Foundation (IFRS). 2022. “IAS 1 Presentation of Financial Statements.” IFRS Standards Navigator. Accessed June 8, 2022. <https://www.ifrs.org/issued-standards/list-of-standards/ias-1-presentation-of-financial-statements/#about>.

with assessing climate-related data.⁴¹ However, despite the quantity of voluntary disclosure resources, investors still lack the ability to easily compare data from entities within specific industries. Investors expend substantial time and resources gathering information through numerous survey responses, databases, and voluntary disclosure platforms to piece together information that may or may not be useful. Additionally, despite the volume of voluntary disclosures, the verification of disclosures have varied from no assurance to limited assurance to reasonable assurance of accuracy. The framework provided in the Proposal will help investors get more relevant, comparable data by providing registrants with much needed guidance about how to distinguish and prioritize what they disclose. This will let investors redirect time and resources wasted on looking for climate-related information toward engaging in thoughtful analysis of reliable and decision-useful information.

Standardized, comparable disclosures of the financial impacts that climate change is having on a registrant's financial statements, as well as management's assessment of its forward-looking exposure to the physical risks of climate change, will let investors determine whether that assessment and the strategy for addressing it are aligned with their investment objectives. Specific geographic information, including the location of assets and critical infrastructure, can help investors assess a registrant's vulnerability to the foreseeable increases in the frequency and intensity of both acute and chronic extreme weather. For example, financial institutions with coastal mortgages are vulnerable to sea level rise.⁴² But without clear, specific, measurable data about a lender's liabilities in a known flood zone, investors can only speculate about how financial institutions are identifying, measuring, or managing those risks. The Proposal would have a company disclose the specific and measurable data needed to determine how it is mitigating its risk exposure through insurance, catastrophe bonds, or other financial arrangements, and how both the impacts and mitigation may affect line items in the company's financial statements.

The Proposal is a critical next step in getting investors the information they need to assess how registrants are dealing with the social, political, economic, and technological responses to climate changes. Investors need consistent, reliable, and comparable data to understand the effect that the transition is having on a company's financial statements and management's assessment of this forward-looking exposure. Of particular importance, investors need to know how the transition may affect key financial estimates and assumptions, particularly for

⁴¹ See generally, proposed rule: Securities and Exchange Commission (SEC). 2022. "The Enhancement and Standardization of Climate-Related Disclosures for Investors." <https://www.sec.gov/rules/proposed/2022/33-11042.pdf>; also see A-Team Group. 2022. "11 Best Climate Risk Providers in 2022." *A-Team Insight* (blog). March 15, 2022. <https://a-teaminsight.com/11-best-climate-risk-providers-in-2022/?brand=ati> (provides a snapshot and overview of the emerging and growing number of data analytic tools available to assess climate-related risk).

⁴² See Wowk, Charlie. 2021. "Burning Down the House: How Inadequate Climate Risk Disclosures and Information Asymmetries Threaten to Disrupt the US Mortgage Market." Climate Risk Disclosure Lab, February 2021. <https://climatedisclosurelab.duke.edu/2021/02/burning-down-the-house-how-inadequate-climate-risk-disclosures-and-information-asymmetries-threaten-to-disrupt-the-u-s-mortgage-market/>.

emissions-intensive industries and those that are adjacent to or reliant on them.⁴³ The Proposal will require disclosure of this information, as well as additional details that investors can use to understand how vulnerable a registrant's operations, strategy, and value chain are to the transition.

The mandatory disclosure of Scope 1, 2, and 3 GHG emissions risks will provide investors with specific and measurable metrics of transition risk. Investors will be able to assess how well aligned a registrant's business is with the trajectory they anticipate for the transition, as well as how aligned management's forward-looking strategy is with their own views. Where registrants have made public statements about their transition plans, the required disclosures will link those statements to specific and measurable emissions and financial data, and require discussion of progress toward achieving any targets. These disclosures will also allow investors to compare registrants across sectors and industries to determine whether their transition strategy is aligned with the investors' investment objectives.

Investors recognize that the changes triggered by the transition include a set of foreseeable events that will materially impact a company's business model and the valuation of its assets. These changes may reduce or eliminate consumer demand for products and services or increase costs of capital, and how businesses confront likely challenges will impact their future performance. The mandatory disclosures included in the proposed rule will provide investors with the qualitative and quantitative data to assess how and whether companies identify vulnerabilities to emerging social, political, economic, and technological changes.

Investors need mandatory climate-related disclosures to assess liability risk exposure

Investors also need comparable, reliable, and decision-useful information about how registrants are exposed to climate-related liability. A recent study found that a growing number of public and private stakeholder groups are turning to the courts to seek compensation for climate-related harms and costs.⁴⁴ As of July 2020, of the 1,550 climate litigation cases filed globally, 1,200 were filed in the United States.⁴⁵ Companies with exposure to these suits face increasing

⁴³ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.

<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

⁴⁴ UN Environment Programme (UNEP). 2021. "In Battle Against Climate Change, Courts Become a New Frontier." UNEP, May 28, 2021.

<https://www.unep.org/news-and-stories/story/battle-against-climate-change-courts-become-new-frontier>.

⁴⁵ *Ibid.*

reputational, operational, and legal risks that will only grow in the future.⁴⁶ For example, companies in carbon-intensive industries face unprecedented community resistance—a result of both growing public support for climate action and historical harms to local communities that have undermined their land rights, access to clean air and water, and healthy ecosystems.⁴⁷ This resistance delays and derails projects, and it can result in often underestimated and under-disclosed operational, legal, and regulatory costs for companies.⁴⁸ The proposed rules will compel registrants to disclose the actual and anticipated material operational and legal costs of responding to climate-related liability risks.

Mandatory disclosure rules will also provide investors with reliable information about how companies are mitigating their liability risk exposure. Companies are using a number of risk-mitigation tools and financial instruments. Investors need to understand how companies are using insurance, bonds, and other hedging tools to mitigate climate-related physical and transition risk exposure, and whether these strategies could create a moral hazard that incentivizes successful transfer of some portion of their physical or transition risk, but not their liability risk. The proposed rule provides investors with specific and measurable data about the sufficiency of the tools and strategy to determine whether or not a company is well-positioned to manage its climate risk exposure.

Investor fiduciaries need mandatory climate-related disclosure to effectively exercise their fiduciary duties on behalf of their participants and beneficiaries.

Investor fiduciaries for employee retirement plans need mandatory climate disclosures to comply with their legal obligations to act in the best interests of plan beneficiaries. They can use both quantitative and qualitative data about a company’s progress in meeting the challenges of a transitioning economy and climate-related physical threats to optimize portfolio performance and serve the interests of current and future beneficiaries. The proposed rule provides investor

⁴⁶ See Letter to SEC Chair Gary Gensler, Re: Response to Call for Public Input on Climate Change Disclosures from Commissioner Allison Herren Lee, June 14, 2021, at

<https://www.sec.gov/comments/climate-disclosure/cil12-9061308-246408.pdf>; Fredericks, Carla F., Mark Meaney, Nicholas Pelosi, and Kate R. Finn. 2018. “Social Cost and Material Loss: The Dakota Access Pipeline.” First Peoples Worldwide; University of Colorado Boulder. <https://www.colorado.edu/program/fpw/DAPL-case-study>; University of California at Berkeley. N.d. “Toxic Tides: Sea Level Rise, Hazardous Sites, and Environmental Justice in California.” <https://sites.google.com/berkeley.edu/toxictides/home?authuser=0>; Center for International Environmental Law (CIEL). 2021. *Formosa Plastics Group: A Serial Offender of Environmental and Human Rights (A Case Study)*. Washington, DC: CIEL. <https://www.ciel.org/reports/formosa-plastics-group-a-serial-offender-of-environmental-and-human-rights/>.

⁴⁷ Smith, Carol. 2014. “Energy Investing: The Indigenous Rights Bubble.” Our World, United Nations University, January 31, 2014. <https://ourworld.unu.edu/en/energy-investing-the-indigenous-rights-bubble>; Commission on Human Rights of the Philippines. 2022. *National Inquiry on Climate Change Report*. Quezon City, Philippines: Commission on Human Rights of the Philippines. <https://chr.gov.ph/wp-content/uploads/2022/05/CHRP-NICC-Report-2022.pdf>.

⁴⁸ Davis, Rachel, and Daniel Franks. 2014. *Costs of Company-Community Conflict in the Extractive Sector*. Cambridge, MA: Harvard Kennedy School Corporate Social Responsibility Initiative. http://www.csr.uq.edu.au/media/docs/603/Costs_of_Conflict_Davis-Franks.pdf.

fiduciaries with access to comparable and reliable information about a company's current and future performance, and ensures that a fiduciary's investment decision-making is aligned with the objectives of the investment policy statement and portfolio management strategy.⁴⁹ The proposed rule provides disclosures that investor fiduciaries have identified as supporting investment decision-making that fulfills specified goals and objectives that have been determined to be in the best interests of current and future beneficiaries.⁵⁰

Mandatory climate-related disclosures will protect investors from market asymmetries and misleading data.

The proposed rule provides much-needed standards to harmonize the manner in which companies articulate foreseeable climate-related risks that have no comparable historic market or environmental precedent. In some instances, particularly where the disclosures in sustainability reports differ from the assertions in Commission filings, investors can find climate-related information to be so confusing as to be misleading about a registrant's financial condition and intentions. Specifically, greenwashing—or presenting false or misleading statements about a company's climate-related activities that appear to be favorable when taken out of context—obscures a registrant's actual risk exposure and therefore misleads investors.

Boilerplate, inconsistent, and vague disclosures can create confusion and cause investors to draw unintended or inaccurate conclusions about a company's performance. The proposed rule provides registrants with direction about how to disclose climate-related information with sufficient specificity to be useful to investors and in a manner that creates consistency and comparability for all registrants.

Additionally, the proposed rule will help address investor concerns about inflated asset valuations caused by hidden or undisclosed climate risks. Reliable climate-related data bring more transparency to markets by eliminating any speculation or uncertainty about the impact of climate-related risks on a company's assets and operations. When climate disclosures are harmonized and linked to company operations and corporate financial statements, the market has a reasonable basis for assigning a fair market value to a company's assets and operations. Mandatory disclosures also provide investors with reliable data about a company's strategy to mitigate its climate risk exposure that may also influence the fair market value of a company and its assets. Under the current disclosure regime, companies do not include sufficient or reliable information about whether the company has retained sufficient insurance or other financial instruments or has otherwise made expenditures to minimize its climate-related risk exposure.

⁴⁹ See Letter from Keith Johnson, Working Group Chair, On behalf of the Fiduciary Duty and Policy Working Group, Intentional Endowments Network, June 14, 2021, available at <https://www.sec.gov/comments/climate-disclosure/cll12-8916212-244987.pdf>.

⁵⁰ See generally, Public Comments from NYC Comptroller Scott Stringer, June 14, 2021 available at <https://www.sec.gov/comments/climate-disclosure/cll12-8916910-245044.pdf>.

Without mandatory disclosures about how a company mitigates its risk exposure, the markets do not accurately reflect the fair market value of the company or its assets. The proposed rule is an important first step in correcting pricing asymmetries in the market.

Registrants will also benefit from mandatory climate disclosure requirements that provide clear expectations of them. Mandatory disclosure rules provide companies with explicit requirements to replace their current discretionary, speculative, and sometimes confounding disclosure norms resulting from lots of disparate investor requests and competing voluntary disclosure frameworks. Mandatory disclosure rules will end this subjectivity for both registrants and investors.

Mandatory disclosures will also enhance market conditions for fair asset pricing. Mandatory disclosures will compel companies to provide data that more accurately reflect the impact of climate-related physical and transition risk exposure on asset values. Currently, registrants can cherry pick climate-related data and include only those programs and policies that place a company in the most favorable light. Shareholder proposals filed for the last several years reflect concerns that carbon-intensive industries may be choosing carbon pricing scenarios, speculative regulatory actions, and subjective approaches to accounting and financial reporting that do not reassure shareholders that companies are actively managing their climate-related risks.

Investors need mandatory disclosure to make data collection more cost-effective.

The proposed rulemaking provides explicit standards about the quality and quantity of data that will streamline data collection processes for investors. In the absence of comprehensive climate disclosure rules, investors expend significant time and resources to find relevant and reliable data. For more than a decade, investors have been subject to the whims of companies using their broad discretion in principles-based approaches to disclosure to determine what information they deem material and how it should be disclosed. Investors are engaging in their own costly and time-consuming searches for reliable data when it would often be far more efficient to use the company's own data and analysis of risk exposure. Mandatory disclosure rules protect investors by placing the responsibility for providing reliable climate-related data with the company and ensuring that the data reflect a company's assessment of its strategies, operations, and performance.

4. Do our current reporting requirements yield adequate and sufficient information regarding climate-related risks to allow investors to make informed decisions? In lieu of, or in addition to the proposed amendments, should we provide updated guidance on how our existing rules may elicit better disclosure about climate-related risks?

The Commission’s current principles-based approach and subsequent developments are not meeting the needs of investors. Along with finalizing the Proposal, the Commission should issue guidance clarifying the disclosures required by existing rules.

The Commission has long recognized the need for disclosure of climate-related impacts on a registrant’s business and financial performance. In 2010, the Commission issued guidance highlighting locations in the annual statements where climate-related disclosures could be required, as well as the circumstances under which such disclosure obligations could be triggered.⁵¹ But the guidance has not prevented registrants from making climate-related and sustainability proclamations in their sustainability reports that are inconsistent with their financial statements.⁵² And because the guidance allows firms to report only those climate risks they assess to be material, many firms provide only vague, boilerplate disclosures or do not address climate risk at all.⁵³

A range of voluntary disclosure standards have been developed in attempts to meet this need. But the proliferation of differing frameworks has increased complexities and costs for registrants and data users. While these standards are now incorporating more forward-looking risk management and governance disclosures that stakeholders want, both investors and issuers complain that the information provided under voluntary frameworks is inadequate for a variety of reasons, including the lack of comparability across frameworks and the omission of material information from certain frameworks, which create incentives for issuers to “shop” for the framework that casts them in the best light.⁵⁴ In the absence of a single set of comparable climate disclosures, investors and other market participants must either expend significant time and resources to find relevant and reliable data or act without full confidence in their conclusions.

As discussed in the introduction, it is of particular concern that companies are failing to disclose material climate-related impacts on their financial statements. Both FASB and IASB have confirmed that climate-related risks must be treated in accordance with the existing disclosure

⁵¹ Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>.

⁵² See Letter to SEC from Fiona Reynolds, Chief Executive Officer, Principles for Responsible Investment, November 9, 2021, available at <https://www.sec.gov/comments/climate-disclosure/c112-9369735-262006.pdf>.

⁵³ Reiners, Lee, and Charlie Wowk. 2020. *Climate Risk Disclosures & Practices: Highlighting the Need for a Standardized Regulatory Disclosure Framework to Weather the Impacts of Climate Change on Financial Markets*. Durham, NC: Climate Risk Disclosure Lab, Global Financial Markets Center, Duke University School of Law. <https://climatedisclosurelab.duke.edu/wp-content/uploads/2020/10/Climate-Risk-Disclosures-and-Practices.pdf>.

⁵⁴ See, e.g., Task Force on Climate-related Financial Disclosures (TCFD). 2020. *Task Force on Climate-Related Financial Disclosures: 2020 Status Report*. TCFD. https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf.

standards.⁵⁵ These requirements for financial statement disclosures are likely not being properly followed, and auditors have not addressed this oversight.⁵⁶

In particular, Scope 3 disclosures are incomplete and unreliable under current reporting requirements and would remain so if the Proposal is finalized in its current form.

Mandatory Scope 3 disclosures are critical for investors and other market participants to evaluate companies' transition risks and the soundness of their financial condition (see response to question 93). Yet only a subset of registrants provide these disclosures and, even among this subset, the disclosures have been incomplete and unreliable. The largest U.S. firms that disclose Scope 3 emissions to global disclosure nonprofit CDP reported just 22 percent of their Scope 3 emissions, and this metric varies widely across industries.⁵⁷

Similarly, MSCI analyzes the emissions disclosures to CDP by constituents of its USA Investable Market Index and finds significant gaps in Scope 3 disclosures. Three categories of Scope 3 emissions—purchased goods and services, use of sold products, and investments—contributed more than 70 percent of the total carbon footprint for constituents of this index. Yet Scope 3 emissions from purchased goods and services and use of sold products were reported at rates of just 78 percent and 43 percent, respectively. Only two percent of financial-sector companies reported the investment category of Scope 3 emissions despite estimates indicating that such emissions account for the largest share of GHG emissions for the sector (92 percent).⁵⁸

Other studies have found the following:

- One review of the Scope 3 disclosures of 56 tech companies found they omitted half of total emissions.⁵⁹ It concludes that lack of methodological clarity has decreased the informative value of such disclosures.

⁵⁵ Proposal at 21362.

⁵⁶ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

⁵⁷ Blanco, Christian, Felipe Caro, and Charles J. Corbett. 2016. "The State of Supply Chain Carbon Footprinting: Analysis of CDP Disclosures by US Firms." *Journal of Cleaner Production* 135, (November): 1189–97. <https://www.sciencedirect.com/science/article/abs/pii/S0959652616308095?via%3Dihub>.

⁵⁸ Watanabe, Kenji, and Umar Ashfaq. 2022. "Which Scope 3 Emissions Will the SEC Deem 'Material'?" *MSCI* (blog). April 28, 2022. <https://www.msci.com/www/blog-posts/which-scope-3-emissions-will/03153333292>.

⁵⁹ Klaaßen, Lena, and Christian Stoll. 2021. "Harmonizing Corporate Carbon Footprints." *Nature Communications* 12, (October). <https://www.nature.com/articles/s41467-021-26349-x>.

- An analysis of science-based targets disclosed by more than 1,000 large companies found that today’s reporting regime has allowed “creative emission accounting and incomplete emission disclosure.”⁶⁰
- A review of “net zero” and “carbon neutral” claims by 25 of the world’s largest companies found that they only committed to reduce their emissions by 40 percent on average.⁶¹ Although Scope 3 emissions represented the vast majority of total emissions—87 percent—only eight of the companies disclosed even a moderate level of detail on their plans to address these emissions.⁶²
- A report on climate reporting by UK-listed companies found that although more companies than ever are reporting emissions, including Scope 3 emissions, “[h]ow Scope 3 emissions were calculated ... was often very unclear.”⁶³

Additional discussion of the failures of Scope 3 disclosures under current reporting requirements is provided in the response to question 98.

The Commission should supplement the amendments in the Proposal with detailed guidance clarifying existing requirements.

Today, companies are failing to disclose important climate-related impacts, considerations, and information. Under existing guidance from accounting standard setters, climate-related risks must be taken into account in developing assumptions, any material assumptions must be disclosed, and statements made elsewhere in a registrant’s annual filings must be consistent with those assumptions. But, as discussed above, this is not happening.⁶⁴ The Commission should address these gaps under existing law by issuing an SAB or similar authoritative communication identifying issues, directing the PCAOB to enforce their existing auditing standards appropriately with respect to climate, and updating industry guides to highlight industry-specific information that registrants should disclose to provide appropriate context. This guidance will give issuers more certainty about what and how to disclose, and further confirm the relationship between climate change and financial risk.

⁶⁰ Bjørn, Anders, Joachim Peter Tilsted, Amr Addas, and Shannon M. Lloyd. 2022. “Can Science-Based Targets Make the Private Sector Paris-Aligned? A Review of the Emerging Evidence.” *Economics and Policy of Climate Change*, (April). <https://link.springer.com/article/10.1007/s40641-022-00182-w>.

⁶¹ New Climate Institute. 2022. “Major Companies Largely Fail Net Zero Climate Pledge Test.” Press release, February 7, 2022. <https://newclimate.org/news/press-release-corporate-climate-responsibility-monitor-2022>.

⁶² *Ibid.*

⁶³ ClientEarth. 2021. “Accountability Emergency: A review of UK-listed companies’ climate change-related reporting (2019-20).” ClientEarth, February 4, 2021. https://www.clientearth.org/latest/documents/accountability-emergency-a-review-of-uk-listed-companies-climate-change-related-reporting-2019-20/?utm_source=programme-email&utm_medium=email&utm_campaign=accountability-emergency.

⁶⁴ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

Still, as its experience with the 2010 climate guidance shows, the Commission cannot rely on guidance alone. Given the magnitude of the economic changes, the difficulties in achieving comparable disclosure to date, the clear incentives identified by the Commission in the Proposal’s cost-benefit analysis to conceal what an explicit duty to disclose does not require, and the strong opinions elucidated in the RFI, a notice-and-comment rulemaking developing a standardized disclosure format is appropriate. This is consistent with previous approaches taken to mandatory disclosure of specified risks with significant potential financial impacts.⁶⁵

5. Should we require a registrant to present the climate-related disclosure in an appropriately captioned, separate part of the registration statement or annual report, as proposed? Should this disclosure instead be presented as part of the registrant’s MD&A?

The Commission should facilitate the streamlining and harmonization of climate-related disclosures within Regulation S-K reporting requirements. For this reason, it should require the presentation of climate-related information in an appropriately captioned, separate part of the registration statement or annual report and throughout relevant existing sections of registration statements or annual reports, as appropriate.

Because of the similarity of the proposed climate-related disclosures and current sections within Form 10-K, it is not possible for a registrant to fulfill various 10-K reporting requirements without including relevant climate-related information in the MD&A, description of business, and risk factors sections of Form 10-K, at a minimum.

This is evident, for instance, in the description of the MD&A reporting requirements in Regulation S-K:

The objective of the discussion and analysis is to provide material information relevant to an assessment of the financial condition and results of operations of the registrant including an evaluation of the amounts and certainty of cash flows from operations and from outside sources. The discussion and analysis must focus specifically on material events and uncertainties known to management that are reasonably likely to cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.⁶⁶

Many critics of disclosure point to the uncertainty of future climate-related events as evidence

⁶⁵ Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>, at 13.

⁶⁶ National Archives and Records Administration. 2022. “PART 229 - STANDARD INSTRUCTIONS FOR FILING FORMS UNDER SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934 AND ENERGY POLICY AND CONSERVATION ACT OF 1975 - REGULATION S-K.” Code of Federal Regulations. Updated June 2, 2022. <https://www.ecfr.gov/current/title-17/chapter-II/part-229>.

that climate reporting is neither feasible nor beneficial. However, mandatory disclosure of material uncertainties that could potentially impact future earnings is not a new or controversial requirement. It is an important component of corporate reporting because it helps articulate the quality of earnings presented. According to Ceres:

These requirements are grounded in the idea that a company's financial statements and accompanying footnotes may be insufficient for an investor to judge the quality of earnings and the likelihood that past performance is indicative of future performance. MD&A is intended to give the investor an opportunity to look at the company through the eyes of management by providing both a short, and long-term analysis of the business of the company.⁶⁷

Climate-related disclosures are key to assessing quality of earnings. Understanding of climate-related risks is critical to judging whether past performance is indicative of future performance or whether novel climate-related factors could lead to significant changes that impact a registrant's business model and future performance. For this reason, climate-related disclosures must be incorporated into MD&A in order for a registrant to fully comply with Regulation S-K.

The market risk section currently required as part of MD&A is necessary to articulate market-related transition risks. According to Regulation S-K, this section includes:

Sensitivity analysis disclosures that express the potential loss in future earnings, fair values, or cash flows of market risk sensitive instruments resulting from one or more selected hypothetical changes in interest rates, foreign currency exchange rates, commodity prices, and other relevant market rates or prices over a selected period of time. The magnitude of selected hypothetical changes in rates or prices may differ among and within market risk exposure categories.

Because of the overlap in the proposed content of climate-related disclosures and current content required as part of Form 10-K, it is appropriate and necessary for registrants to discuss climate-related risks throughout various sections of Form 10-K. We recommend the Commission clarify that climate-related disclosures should already be made as part of the MD&A, description of business, and risk factors sections within the Form 10-K at a minimum. We also recommend that the Commission additionally require climate-related disclosures in a new standalone climate section within Form 10-K, and within the consolidated financial statements as discussed in this letter. We believe this will facilitate the most appropriate presentation of information that best

⁶⁷ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres.
<https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>.

aligns with current requirements under Regulation S-K.

In addition to climate-related disclosures supported in this comment for public companies, the Commission should collect the same climate-related risk disclosures from private funds.⁶⁸ There has been a longstanding movement of capital from public to private markets, partially because inadequate reporting requirements allow private firms to bypass accountability and scrutiny from investors over unmanaged risks and poor governance. This Proposal to require climate disclosures from only public companies would allow private companies—even those with high levels of climate related-risks and GHG emissions—to continue to avoid appropriate disclosures that would facilitate accurate asset valuation.⁶⁹ To address the interaction of climate-related risk with the this trend's effects on investors and other market participants, the Commission should expand the scope of climate disclosure requirements to include private funds

Private funds in the U.S., such as hedge funds and private equity funds, have an outsized impact on our financial markets, economy, and climate yet are not subject to the same reporting requirements as mutual funds and other investment vehicles due to regulatory exemptions they both received in 1996.⁷⁰ At the time, hedge funds and private equity funds were both under \$250 billion in size; however, since then, private funds have grown exponentially to \$18 trillion. Given the size of private funds today and the correlated level of impact those risks, especially transition risks, have to other investors and other market participants, the Commission urgently needs to expand its private fund reporting requirements so that investors in them have an adequate set of disclosures to evaluate their investments and regulators have a more complete picture of how those risks collectively affect the entire financial system.

Recognizing the potential for “regulatory arbitrage” between the more lenient reporting requirements for private versus public companies, the United Kingdom as of April 2022 requires private companies with more than 500 employees and more than £500 million in annual revenue to disclose climate-related financial data in line with the TCFD.⁷¹ The European Union is also

⁶⁸ Securities and Exchange Commission. Release No. IA-5950, Amendments to Form PF to Require Current Reporting and Amend Reporting Requirements for Large Private Equity Advisers and Large Liquidity Fund Advisers. Jan 26, 2022. <https://www.sec.gov/rules/proposed/2022/ia-5950.pdf>

⁶⁹ Stutts, Jordan. New Private Markets. ‘Regulatory arbitrage’ threatens private markets if SEC does not keep pace. Mar 16, 2022.

<https://www.newprivatemarkets.com/regulatory-arbitrage-threatens-private-markets-if-sec-doesnt-keep-pace/>

⁷⁰ Securities and Exchange Commission. Release No. IC-22597, Privately Offered Investment Companies. Apr 3, 1997. <https://www.sec.gov/rules/final/ic-22597.txt>

⁷¹ Department for Business, Energy & Industrial Strategy. UK to enshrine mandatory climate disclosures for largest companies in law. Oct 29, 2021.

<https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law>

requiring in its proposed Corporate Sustainability Reporting Directive that all large public and private companies provide ESG and human capital data by 2024.⁷²

6. Should we permit a registrant to incorporate by reference some of the climate-related disclosure from other parts of the registration statement or annual report, as proposed? Should we permit a registrant to incorporate by reference climate-related disclosure that appears in a sustainability report if the registrant includes the incorporated by referenced disclosure as an exhibit to the registration statement or annual report? Are there some climate-related disclosure items, such as GHG emissions data, that we should not permit a registrant to incorporate by reference? Would requiring a registrant to include all of the proposed climate-related disclosures in a separate, appropriately captioned section, while precluding a registrant from incorporating by reference some or all of the climate-related disclosures, promote comparability and ease of use of the climate-related information for investors?

The Commission should not permit incorporation by reference of sustainability reports that have not otherwise been filed with the Commission.

Sustainability reports are not subject to the same level of assurance as filings with the Commission, and are not appropriate for incorporation by reference. As discussed in the response to question 1, mandatory disclosure in annual reports is necessary in part because of challenges with the accuracy and completeness of disclosures made in sustainability reports. Permitting incorporation by reference of these less reliable reports would jeopardize the integrity of the climate-related disclosures. If registrants believe the information in those reports is valuable and meets the standards for inclusion in a filing with the Commission, they can include it in the separate, appropriately captioned section of the annual report.

7. Should we permit a registrant to provide certain of the proposed climate-related disclosures in Commission filings other than the annual report or registration statement? For example, should we permit a registrant to provide information about board and management oversight of climate-related risks in its proxy statement?

The Commission should require that all climate-related disclosures be provided in the annual report or registration statement.

For the reasons discussed in the response to question 1, investors are best served by keeping all information about climate-related risks together in the same location as other information about

⁷² European Commission. Questions and Answers: Corporate Sustainability Reporting Directive Proposal. Apr 21, 2021.
https://www.wlrk.com/docs/European_Commission_Corporate_Sustainability_Reporting_Directive_proposal.pdf

business risks and performance. Any climate-related disclosure provided in the proxy statement or other commission filings should also be provided in the annual report or registration statement.

9. Should we define “climate-related risks” to mean the actual or potential negative impacts of climate-related conditions and events on a registrant’s consolidated financial statements, business operations, or value chains, as proposed? Should we define climate-related risks to include both physical and transition risks, as proposed? Should we define physical risks to include both acute and chronic risks and define each of those risks, as proposed? Should we define transition risks, as proposed? Are there any aspects of the definitions of climate-related risks, physical risks, acute risks, chronic risks, and transition risks that we should revise? Are there other distinctions among types of climate-related risks that we should use in our definitions? Are there any risks that we should add to the definition of transition risk? How should we address risks that may involve both physical and transition risks?

While the Commission is generally correct to propose defining “climate-related risks” as the actual or potential negative impacts of climate-related conditions and events on a registrant’s consolidated financial statements, an important part of regular business reporting, the definitions should be amended to also include the intersection of climate-related risks and the adverse consequences to communities from corporate activities.

The proposed definitions are similar to those adopted by the TCFD and other existing reporting frameworks.⁷³ The Commission may be adopting TCFD-aligned definitions to reduce the costs of implementing disclosure requirements for registrants who already use TCFD or one of the TCFD-aligned frameworks. Adopting this definition would also facilitate future efforts at global harmonization, improving the cross-border comparability of climate-related disclosures. However, the TCFD-aligned definitions do not address the intersection of climate-related risks and the adverse consequences to communities from corporate activities. Investors cannot fully understand the scope and impact of climate-related risks on a company’s financial performance without understanding those adverse consequences to communities.

The proposed definition for “physical risks” omits chronic threats to public health and safety.⁷⁴ Climate change is widely viewed as the greatest threat to public health in recent times,⁷⁵ and chronic public health threats to workers and surrounding communities from extreme heat, poor

⁷³ Proposal at 21349.

⁷⁴ Proposal at 21465.

⁷⁵ Somer, Lauren (September 7, 2021). “Climate Change Is the Greatest Threat To Public Health, Top Medical Journals Warn.” *NPR*. <https://www.npr.org/2021/09/07/1034670549/climate-change-is-the-greatest-threat-to-public-health-top-medical-journals-warn>

air quality, reduced quantity and quality of food and water, changes to infectious-disease vectors, strain on infrastructure, political instability, and population displacement⁷⁶ are likely to pose ongoing risks to businesses. As demonstrated by the COVID-19 pandemic, public health and safety threats pose significant risk to a registrant's financial performance. Mandatory disclosures on these risks would benefit investors and other market participants.

The Commission should adopt the following revised definition for chronic risks:

Chronic risks relate to longer-term weather patterns and related effects, including but not limited to sustained higher temperatures, sea level rise, drought, and increased wildfires, as well as related effects such as decreased arability of farmland, decreased habitability of land, and systemic threats to public health and safety, such as extreme heat, poor air quality, reduced quantity and quality of food and water, changes to infectious disease vectors, strain on infrastructure, political instability, and population displacement.

Transition risks: The proposed rule defines transition risk as: “the actual or potential negative impacts on a registrant’s consolidated financial statements, business operations, or value chains attributable to regulatory, technological, and market changes to address the mitigation of, or adaptation to, climate-related risks, such as increased costs attributable to changes in law or policy, reduced market demand for carbon-intensive products leading to decreased prices or profits for such products, the devaluation or abandonment of assets, risk of legal liability and litigation defense costs, competitive pressures associated with the adoption of new technologies, reputational impacts (including those stemming from a registrant’s customers or business counterparties) that might trigger changes to market behavior, consumer preferences or behavior, and registrant behavior.”⁷⁷

This definition of transition risk lacks several critical components:

- The 2017 recommendations from the TCFD include in the definition of reputational risk “community perceptions of an organization’s contribution to or detraction from the transition to a lower-carbon economy.”³⁶ In many carbon-intensive and extractive industries, community resistance to new projects is increasingly the norm, not the exception. This has led to negative impacts on financial performance, including the delay or cancellation of projects, loss or delay of permits due to community concerns, increased regulatory scrutiny, and legal challenges to environmental impact statements and permits, as well as the passage of new regulations that impose expensive environmental protection and public health requirements or restrictions on

⁷⁶ EPA (2021). Climate indicators: Understanding the connections between climate change and human health. <https://www.epa.gov/climate-indicators/understanding-connections-between-climate-change-and-human-health>

⁷⁷ Proposal at 21466

- registrants.³⁷
- Rising racial and economic inequality should be included as an element of transition risk. People of color and lower-income households already face higher levels of toxic pollution as a result of decades of racist and inequitable housing, lending, and zoning policies; they are also more likely to face harm from extreme weather and other climate impacts to infrastructure, public health, and local economies. According to a recent study by the U.S. Environmental Protection Agency (EPA), Black individuals in the U.S. are 40 percent more likely to live in areas with the highest projected increases in mortality rates due to climate-driven changes in extreme temperatures. Hispanic and Latino individuals are 43 percent more likely to live in areas with the highest projected labor hour losses in weather-exposed industries. American Indian and Alaska Native individuals are 48 percent more likely to live in areas where the highest percentage of land is projected to be inundated due to sea level rise.⁴ Climate change and the activities that contribute to it are accelerating existing disparities in housing, economic opportunity, public health, and safety, as well as in the affordability, reliability, and availability of essential services such as electricity, potable water, heat, and infrastructure. This will have implications across the market and for individual registrants, as inequality has been shown to depress economic growth: rising inequality in the U.S. from 1990 to 2010 reduced growth by about five percentage points per capita over the period.³⁸
 - Potential violations of Indigenous and tribal people’s land rights should be included in the definition of transition risk. Section 229.1503 of the Proposal identifies “the protection of high conservation value land or natural assets” as an important aspect of risk management to be discussed in disclosure of a registrant’s transition plan.⁷⁸ Violations of Indigenous and tribal people’s land rights (as well as rising inequality⁷⁹) threaten the resilience of the ecosystems that provide climate stability and resilience for communities and supply chains. In the transition, increasing attention will be paid to preserving ecosystems that ensure climate stability, such as forests, peatlands, and mangroves. Investors looking to protect their investments from climate risk and registrants with value chains that depend on these ecosystems need to understand and mitigate the risks to these ecosystems. Indigenous and tribal peoples are critical to forest conservation and climate stability: studies show that ancestral lands and land under title by Indigenous peoples are the most biodiverse and best conserved on the planet. And a 2019 report on climate change and land use from the Intergovernmental Panel on Climate Change (IPCC) found that agricultural practices that incorporate Indigenous and local knowledge are more effective in adjusting to deforestation,

⁷⁸ Proposal at 21468.

⁷⁹ The most recent IPCC report on climate adaptation identifies reducing inequality as a critical strategy for maintaining forests and other critical ecosystems and their biodiversity. Intergovernmental Panel on Climate Change (IPCC) Working Group II. 2022. *IPCC Sixth Assessment Report: Climate Change 2022: Impacts, Adaptation and Vulnerability*. IPCC. <https://www.ipcc.ch/report/ar6/wg2/>.

biodiversity loss, and other challenges.³⁹ As the number of investor and company commitments to reduce deforestation increases, companies that have infringed on the human rights, land rights, and safety of Indigenous groups and local communities will face increasing scrutiny and public resistance.

Therefore, the Commission should adopt the following revision to the definition of transition risk:

Transition risks are the actual or potential negative impacts on a registrant's consolidated financial statements, business operations, or value chains attributable to regulatory, technological, social, and market changes to address the mitigation of, or adaptation to, climate-related risks, such as increased costs attributable to changes in law or policy, reduced market demand for carbon-intensive products leading to decreased prices or profits for such products, the devaluation or abandonment of assets, risk of legal liability and litigation defense costs, competitive pressures associated with the adoption of new technologies, as well as reputational, operational, legal, and political impacts (including those stemming from a registrant's customers or business counterparties as well as adverse social conditions such as increasing inequality, land and human rights violations, or shifts in community perceptions of a registrant's contribution to or detracting from the transition to a lower-carbon economy) that might trigger changes to market behavior, consumer preferences or behavior, and registrant behavior.

To understand and account for these expanded definitions of risks, investors need disclosure of the actual and anticipated adverse consequences to communities (“community consequences”) of a registrant’s regular business operations, climate mitigation efforts, or transition activities (“corporate activities”), including:

- Abuses and/or disrespect of human rights in contravention of international treaties and conventions
- Infringement of Indigenous or tribal rights and territories, in contravention of international conventions mandating Free Prior and Informed Consent
- Threats to livelihoods and community resilience due to emissions, physical risks, transition risks, or other corporate contributions to climate-related impacts, such as those caused by land use change, deforestation, ecosystem degradation, and overuse of or damage to natural resources
- Damages to public and/or worker health and safety due to physical risks, emissions and associated pollution, such as toxic chemical, air, and water pollution or inadequate safety precautions
- Disruption of local economies and worker dislocation
- Racial and economic inequities exacerbated or produced by these community

consequences

15. Are there other specific metrics that would provide investors with a better understanding of the physical and transition risks facing registrants? How would investors benefit from the disclosure of any additional metrics that would not necessarily be disclosed or disclosed in a consistent manner by the proposed climate risk disclosures? What, if any, additional burdens would registrants face if they were required to disclose additional climate risk metrics?

Consistent with the expanded definitions of climate-related risks in our response to question 9, the Commission should require that all registrants should be required to disclose:

- Any and all public or community campaigns, protests, or resistance movements related to the registrant’s contribution or opposition to the transition to a lower-carbon economy and connected community consequences, as well as the registrants’ responses and actions to address such opposition
- Any and all land rights grievances or complaints filed by Indigenous or tribal peoples in the registrants’ areas of operations where climate-related risks or climate-related opportunities have been identified or significant scope 1, 2, or 3 GHG emissions are expected
- The proximity of identified physical risks to vulnerable communities, including communities of color and low-income communities, and sensitive community locations (schools, hospitals, daycare centers, playgrounds, residential areas etc.)
- The description and location of any emergent risks to public health and safety caused by climate-related business operations or transition activities
- The locations of all sources of hazardous waste or criteria air pollutants owned or operated by the registrant that may be impacted by identified physical risks

17. Should we include the negative impacts on a registrant’s value chain in the definition of climate-related risks, as proposed? Should we define “value chain” to mean the upstream and downstream activities related to a registrant’s operations, as proposed? Are there any upstream or downstream activities included in the proposed definition of value chain that we should exclude or revise? Are there any upstream or downstream activities that we should add to the definition of value chain? Are there any upstream or downstream activities currently proposed that should not be included?

The Commission should include the negative impacts on a registrant’s value chain in the definition of climate-related risks, and define “value chain,” as proposed. The term should also include insurance-associated emissions as a downstream activity akin to investments.

The negative impacts of a company’s failure to prepare for physical and transition risks are often seen in its value chain. Thus, the Commission correctly included impacts on the value chain in its definition of climate risks.

The proposed definition of value chain is appropriate because it makes clear that the value chain includes all upstream and downstream activities related to a registrant’s operations. The Commission should provide additional clarity to registrants by referencing the proposed Scope 2 and Scope 3 definitions, which provide useful examples of these activities.

The Commission should require additional decision-useful information by expressly including the underwriting activities of insurers in its definitions of climate-related risks and value chain. The TCFD and PCAF have both recognized that the underwriting activities of insurers reflect many of the same considerations that investors care about when seeking Scope 3 emissions.⁸⁰ Insurance underwriting is a main source of revenue for insurers, and the emissions embedded in insurers’ underwriting decisions provide an important source of information about the transition risks they face. It is especially important for investors and other market participants to understand this information in conjunction with the Scope 3 emissions created through an insurer’s investments (insurers’ other main source of revenue). Disclosing Scope 3 emissions or their equivalent from insurance underwriting will help provide a complete picture of the way transition risk may impact an insurer’s existing sources of revenue. Recognizing both this need and the challenges associated with assessing insurance-associated emissions, PCAF has launched a consultation process and is developing a methodology for quantifying those emissions.

18. Should we define climate-related opportunities as proposed? Should we permit a registrant, at its option, to disclose information about any climate-related opportunities that it is pursuing, such as the actual or potential impacts of those opportunities on the registrant, including its business or consolidated financial statements, as proposed? Should we specifically require a registrant to provide disclosure about any climate-related opportunities that have materially impacted or are reasonably likely to impact materially the registrant, including its business or consolidated financial statements? Is there a risk that the disclosure of climate-related opportunities could be misleading and lead to “greenwashing”? If so, how should this risk be addressed?

The Commission should define climate-related opportunities as proposed.

⁸⁰ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Guidance on Metrics, Targets, and Transition Plans*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>, at 57; Partnership for Carbon Accounting Financials (PCAF). 2022. *GHG Emissions Associated to Insurance and Reinsurance Underwriting Portfolios: Scoping Document*. PCAF. <https://carbonaccountingfinancials.com/files/2022-03/pcaf-scoping-doc-insurance-associated-emissions.pdf?031a1633b0>.

The disclosure of climate-related opportunities should not be required, though registrants should be allowed to discuss opportunities as they pertain to climate-related risk management, and any opportunities that have material impacts or are likely to have material impacts on their business or consolidated financial statements. While all firms face climate-related risks, not all firms have identified climate-related opportunities or are currently pursuing identified climate-related opportunities. Part of the Commission’s core mission is to protect investors, which is why the disclosure of climate-related *risks* must be required, as proposed. Climate-related opportunities can be identified and used to manage risks as well as inform strategy and should be discussed as relevant but not required, as the disclosure of climate-related opportunities is not essential to investor protection.

To avoid the risk of “greenwashing,” the Commission should require disclosures about climate-related opportunities made within SEC filings to be subject to assurance whenever appropriate, and should appropriately enforce laws and regulations governing material misstatements, omissions, fraud, and discrepancies between a registrant’s discussion of climate-related opportunities and the information disclosed in its audited financial statements, qualitative discussion of climate-related risks, and verified GHG reporting.

19. Should we require a registrant to describe the actual and potential impacts of its material climate-related risks on its strategy, business model, and outlook, as proposed? Should we require a registrant to disclose impacts from climate-related risks on, or any resulting significant changes made to, its business operations, including the types and locations of its operations, as proposed?

The Commission should require that a registrant describe the actual and potential impacts of its material climate-related risks on its strategy, business model, and outlook as well as the impact from climate-related risks on, or any resulting significant changes made to, its business operations, including the types and locations of its operations, as proposed.

A registrant’s disclosure regarding how its strategies and business model might change to address potential climate-related risks and opportunities is central to understanding management’s response to climate-related risks. Investors must have the information necessary to evaluate a registrant’s treatment of climate-related risks and to assess whether due measures are being taken to mitigate material impacts.

The disclosure of climate-related risks and potential resulting impacts of those risks is important because market participants currently use “outdated methods of risk assessment”—partially due to data gaps and lack of disclosure—that result in the mispricing of climate-related risk

throughout the market, which can harm investors.⁸¹ Current means of risk assessment and strategic planning overly rely on historical data that often have questionable value for business planning in the context of climate change, which will cause a nonlinear increase in impacts and damages over the coming decades, and drive growing pressure for speedy decarbonization. For instance, oil and gas companies rely on an average historical oil price to calculate and disclose their economically viable reserves. This method is blind to transition risks associated with the terminal decline of oil prices projected for the next thirty years.⁸² Very few oil and gas companies currently discuss these risks and potential impacts that seismic market shifts could have on the economic viability of different projects and overall reserves figures.⁸³ This is only one example of how the identification and assessment of physical and transition risks can play an important role in accurate asset valuation. According to the TCFD:

The financial crisis of 2007-2008 was an important reminder of the repercussions that weak corporate governance and risk management practices can have on asset values. This has resulted in increased demand for transparency from organizations on their governance structures, strategies, and risk management practices. Without the right information, investors and others may incorrectly price or value assets, leading to a misallocation of capital.⁸⁴

To make matters worse, most risk-assessment practices also do not adequately account for the unlikely and unanticipated nature of impacts from climate change. For instance, the steady escalation of climate-related natural disasters in recent decades is unprecedented in human history. These impacts will inevitably grow through mid-century. In order to better respond to this new set of unprecedented and unanticipated impacts, economists call for a new approach to assessing and responding to climate-related financial risks based on the “precautionary principle.”⁸⁵ Companies that do not also begin to prepare for such severe and frequent phenomena will be financially exposed.

To correct the mispricing of climate risk, the TCFD recommends detailed disclosures of information regarding climate-related risks and potential impacts, noting that “one of the

⁸¹ Condon, Madison. 2021. “Market Myopia’s Climate Bubble.” *Utah Law Review* 63, *Boston University School of Law Research Paper*: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782675, at 5.

⁸² Hittle, Ann-Louise, Massimo Di Odoardo, Alan Gelder, Erik Mielke. 2021. “Reversal of Fortune: Oil and Gas Prices in a 2-Degree World.” *Wood Mackenzie*, April 2021. <https://www.woodmac.com/horizons/reversal-of-fortune-oil-and-gas-prices-in-a-2-degree-world/>.

⁸³ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

⁸⁴ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD. <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at ii.

⁸⁵ Chenet, Hugues, Josh Ryan-Collins, Frank van Lerven. 2021. “Finance, Climate-Change and Radical Uncertainty: Towards a Precautionary Approach to Financial Policy.” *Ecological Economics* 182, (May): 106957. <https://www.sciencedirect.com/science/article/pii/S0921180092100015X>.

essential functions of financial markets is to price risk to support informed, efficient capital-allocation decisions.”⁸⁶

Assessment of risk and impacts is important not just at the firm level but also for individual assets and operations. Climate risk must be evaluated using “fine-grained asset level data.”⁸⁷ This is true especially in the case of physical risks: “[M]any climate risks are local in nature, so assets must be evaluated geospatially.”⁸⁸

In addition to the TCFD, the International Sustainability Standards Board (ISSB), a body established by the International Financial Reporting Standards (IFRS) Foundation, also recommends asset-level disclosures including “a description of where in its value chain significant climate-related risks and opportunities are concentrated (for example, geographical areas, facilities or types of assets, inputs, outputs or distribution channels).”⁸⁹

Aligning the Proposal with the TCFD reporting framework as well as the ISSB draft standard with regard to disclosures of the types and locations of assets at risk from climate change will also ensure maximum consistency with existing reporting regimes and benefit investors and registrants alike.

Without a requirement for detailed disclosure of a registrant’s risks, many companies with high transition risks will conceal them from shareholders. In a 2020 report, the National Whistleblower Center applied the methods of professional fraud investigators—which entails analysis of incentives, opportunities, and rationalizations to commit fraud—to the fossil fuel industry and concluded that there is a likelihood of fraudulent concealment of transition risks in the industry. The report reviewed the industry’s record of deceptions around climate risks and found that overstatements of reserves and other potential accounting frauds warranted attention from regulators, prosecutors and whistleblowers.⁹⁰

20. Should we require a registrant to disclose climate-related impacts on, or any resulting

⁸⁶ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD.

<https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at ii.

⁸⁷ Condon, Madison. 2021. “Market Myopia’s Climate Bubble.” *Utah Law Review* 63, Boston University School of Law Research Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782675, at 1.

⁸⁸ *Ibid*, at 17.

⁸⁹ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation. <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 35.

⁹⁰ Kostyack, John, Karen Torrent, Laura Peterson, and Carly Fabian. 2020. *Exposing a Ticking Time Bomb: How Fossil Fuel Industry Fraud Is Setting Us Up for a Financial Implosion—and What Whistleblowers Can Do About It*. Washington, DC: National Whistleblower Center (NWC). <https://www.whistleblowers.org/wp-content/uploads/2020/07/NWC-Climate-Risk-Disclosure-Report.pdf>.

significant changes made to, its products or services, supply chain or value chain, activities to mitigate or adapt to climate-related risks, including adoption of new technologies or processes, expenditure for research and development, and any other significant changes or impacts, as proposed? Are there any other aspects of a registrant's business operations, strategy, or business model that we should specify as being subject to this disclosure requirement to the extent they may be impacted by climate-related factors?

The Commission should require that a registrant disclose climate-related impacts on, or any resulting significant changes made to, its products or services, supply chain or value chain, activities to mitigate or adapt to climate-related risks, including adoption of new technologies or processes, expenditure for research and development, and any other significant changes or impacts as proposed.

According to CDP, climate-related impacts on supply chains are significant and warrant disclosure so that investors are not presented with an inaccurate, incomplete picture of the scope of risks a company faces. The organization recently found that GHG emissions in a company's supply chain are, on average, 11.4 times higher than its operational emissions.

As stated in response to question 19, investors need information not just on climate-risks identified by a registrant, but also on how a registrant plans *to respond* to these risks. As is the case with all risk management, a registrant's responses and adaptation to risks can be a key factor in defining its competitive edge. This applies not only to a company's immediate operations but also to the entire value chain; together, they offer a comprehensive picture of risks that could impact a company's financial condition. All firms may face climate risk, but not all firms will handle these risks in the same way or find the same success. Some firms and sectors are more capable of managing these risks. Some firms may even choose not to mitigate and take the chance that their identified risks will not materialize. Investors and other market participants can judge for themselves whether these strategies meet their needs and risk appetite. But to do so, they need insight into a registrant's plans to mitigate or adapt to climate-related risks. Requiring disclosure of this information facilitates comparisons of firms and efficient allocation of capital.

21. Should we require a registrant to specify the time horizon applied when assessing its climate-related impacts (i.e., in the short, medium, or long term), as proposed?

The Commission should require that registrants specify the time horizon applied when assessing climate-related impacts as proposed.

Specifying the time horizon is critical because the timescale of anticipated climate-related risks has proven to be one of the main challenges for incorporating risks into present-day reporting and

investment practices.

According to the TCFD:

The large-scale and long-term nature of the problem makes it uniquely challenging, especially in the context of economic decision making. Accordingly, many organizations incorrectly perceive the implications of climate change to be long term and, therefore, not necessarily relevant to decisions made today. The potential impacts of climate change on organizations, however, are not only physical and do not manifest only in the long term.⁹¹

Additionally, registrants may be relying on metrics and proxies to measure the impact of various risks that are not appropriately tailored to a given time horizon. For instance, “[c]orporate managers may continue to rely on outdated methods of risk assessment which may suffer from a *duration mismatch*. Insurance premiums, for example, can no longer be relied upon to serve as a proxy for the cost of physical risk on a contemplated project.”⁹² Many common risk-management frameworks are based on a time horizon that inadvertently hides potential climate risks. This duration mismatch is reflected in the lack of integration of climate-related financial risks on current balance sheets.⁹³

It is therefore critical that investors understand the timescales being used to assess risks. According to a report by World Resources Institute and the United Nations Environment Programme Finance Initiative:

[An] important consideration when assessing exposure indicators relates to the time boundaries inherent in various metrics. For example, current annual GHG emissions data are not necessarily representative of a company’s future emissions profile; some companies will diversify or invest in lower-carbon assets over time, while others will not. For this reason, while it is important to assess a company’s current profile, it is also critical to evaluate information that can provide insight into how that profile might evolve over time, including whether such changes could lead to higher or lower carbon risk.⁹⁴

Disclosure of the time horizons used to assess impacts will provide investors with the

⁹¹ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD.

<https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at ii.

⁹² Condon, Madison. 2021. “Market Myopia’s Climate Bubble.” *Utah Law Review* 63, *Boston University School of Law Research Paper*: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782675, at 5.

⁹³ Chenet, Hugues, Josh Ryan-Collins, Frank van Lerven. 2021. “Finance, Climate-Change and Radical Uncertainty: Towards a Precautionary Approach to Financial Policy.” *Ecological Economics* 182, (May): 106957.

<https://www.sciencedirect.com/science/article/pii/S092180092100015X>, at 5.

⁹⁴ Fulton, Mark, and Christopher Weber. 2015. *Carbon Asset Risk: Discussion Framework*. World Resources Institute and UNEP Finance Initiative. <https://www.wri.org/research/carbon-asset-risk-discussion-framework>, at 25.

information necessary to assess the durability of a registrant’s conclusions regarding impacts and whether important information may be missing due to an ill-conceived or inappropriate time horizon. Finally, this requirement as proposed aligns with both the TCFD framework and the draft IFRS Sustainability Disclosure Standard. Where appropriate, broad alignment with these standards is a means to ensure consistency and comparability across registrants.

22. Should we require a registrant to discuss whether and how it considers any of the described impacts as part of its business strategy, financial planning, and capital allocation, as proposed? Should we require a registrant to provide both current and forward-looking disclosures to facilitate an understanding of whether the implications of the identified climate-related risks have been integrated into the registrant’s business model or strategy, as proposed? Would any of the proposed disclosures present competitive concerns for registrants? If so, how can we mitigate such concerns?

The Commission should require that a registrant discuss whether and how it considers any of the described impacts as part of its business strategy, financial planning, and capital allocation, as proposed.

Discussion of how a registrant plans to manage impacts is as important as the impacts themselves since it helps investors to assess a registrant’s likely resiliency to the impacts of climate change and the transition to a decarbonized economy.⁹⁵

According to the TCFD, “an organization’s disclosure of how its strategies might change to address potential climate-related risks and opportunities is a key step to better understanding the potential implications of climate change on the organization.”⁹⁶

An investor can begin to evaluate resiliency by assessing whether a registrant is responsive to climate-related impacts. This is evident in a registrant’s discussion of its business strategy, financial planning, and capital allocation. These disclosures will allow investors and other data users to verify whether a company’s stated commitments to risk management are actually reflected in business decisions. If not, investors will have the information to decide that a company is not adequately adapting its business model in the face of climate-related risks.

Investors also need to know whether company managers are accounting for climate risks when making investment decisions, because “the more that a company is incorporating climate-related factors into their strategy and risk management processes, the better prepared it is likely to be for

⁹⁵ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD.

<https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at 5.

⁹⁶ *Ibid.*

the transition to a low-carbon economy.”⁹⁷ In addition, it is important for companies to disclose their mechanisms for incorporating risk factors into capital expenditure strategy including capital allocation so investors can determine the amount of risk that registrants are undertaking. It is also critical for companies to explain the processes by which they come to investment decisions and factors that could lead them to reassess investments so that investors can determine whether these decision-making processes align with their expectations and risk tolerance.⁹⁸

The TCFD reinforces that disclosures related to business strategy, financial planning, and capital allocation play a central role in evaluating the financial health of a registrant and making investment decisions accordingly: “Organizations that invest in activities that may not be viable in the longer term may be less resilient to the transition to a lower-carbon economy; and their investors will likely experience lower returns.”⁹⁹

The Commission should also require registrants to include both current and forward-looking disclosures in order to facilitate investor understanding of how they have integrated the implications of identified climate-related risks into their business models or strategies, as proposed. Climate change means that the future will not look like the past. Its uncertain trajectory also means that registrants making decisions regarding capital allocation and business strategy for any time outside of the immediate present must do so using discretionary forward-looking estimates, projections, and assumptions. Investors must be equipped with the information needed to assess the reasonableness of management’s projections of the future. With that information, they can determine whether a registrant is allocating capital prudently. This is especially important for investment decisions for capital-intensive sectors that have longer capital allocation planning horizons relative to many others, like the energy sector.¹⁰⁰

Forward-looking disclosures regarding how a company is responding to potential risks and future uncertainties will help shed light on projections of future performance that many registrants are already conducting internally.

The Commission is not asking registrants to predict the future, any more than it does when it requires other forward-looking disclosures. It is asking for disclosure of information that a registrant is using to plan for an uncertain future. Companies conduct long-term, forward-looking scenario planning using a variety of variables to inform strategy and business planning decisions.

⁹⁷ Carbon Tracker Initiative. 2019. “Reporting for a Secure Climate: A Model Disclosure for Upstream Oil and Gas.” Carbon Tracker Initiative, May 3, 2019. <https://carbontracker.org/reports/reporting-for-a-secure-climate-a-model-disclosure-for-upstream-oil-and-gas/>, at 3.

⁹⁸ *Ibid.*

⁹⁹ Task Force on Climate-Related Financial Disclosures (TCFD). 2017. *Recommendations of the Task Force on Climate-Related Financial Disclosures*. TCFD. <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>, at iii.

¹⁰⁰ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>.

However, registrants often provide little to no detail to investors regarding the forward-looking assumptions used in these assessments. Chevron’s recent Climate Change Resilience report demonstrates the opacity of current disclosures:

Chevron’s strategic and business planning processes bring together the Company’s views on long-term energy market fundamentals to guide decision making by executives and facilitate oversight by the Board of Directors. We use proprietary models to forecast demand, energy mix, supply, commodity prices, and carbon prices—all of which include assumptions about future policy and technology developments.¹⁰¹

Mandatory disclosure will shine light on these opaque internal processes and allow investors to assess how a company views the future and makes business decisions, and whether its views align with an investor’s own projections and risk preferences.

23. Should we require the disclosures to include how the registrant is using resources to mitigate climate-related risks, as proposed? Should the required discussion also include how any of the metrics or targets referenced in the proposed climate-related disclosure subpart of Regulation S-K or Article 14 of Regulation S-X relate to the registrant’s business model or business strategy, as proposed? Should we require additional disclosures if a registrant leverages climate-related financing instruments, such as green bonds or other forms of “sustainable finance” such as “sustainability-linked bonds,” “transition bonds,” or other financial instruments linked to climate change as part of its strategy to address climate-related risks and opportunities? For example, should we require disclosure of the climate-related projects that the registrant plans to use the green bond proceeds to fund? Should we require disclosure of key performance metrics tied to such financing instruments?

The Commission should require that a registrant disclose how it is using resources to mitigate climate-related risks, as proposed. It should also require registrants to include how the metrics or targets referenced in the proposed climate-related disclosure subpart of Regulation S-K or Article 14 of Regulation S-X relate to the registrant’s business model or business strategy, as proposed.

In addition to understanding identified risks and potential impacts, investors and other market participants must have the information necessary to assess a registrant’s response to these risks. Risk management is a longstanding pillar of annual business reporting. While many firms in a given sector might face the same set of risks and potential impacts, responses to and management of those risks can vary widely between firms and thus can go a long way in informing a potential investor about the relative attractiveness of investment in different firms.

¹⁰¹ Chevron. 2021. *Climate Change Resilience: Advancing a Lower Carbon Future*. San, Ramon: Chevron. <https://www.chevron.com/-/media/chevron/sustainability/documents/climate-change-resilience-report.pdf>, at 3.

One key component in assessing the quality of a response is whether and how the registrant is allocating resources to mitigate climate-related risks. It indicates the extent to which a firm is operationalizing its stated commitment to risk management. If a firm has identified material risks that could impact the company's financial performance but does not allocate adequate resources to mitigate that risk, investors may have cause for concern.

The Commission could further illuminate the use of resources used to mitigate climate-related risks by requiring disclosure in alignment with the draft IFRS Sustainability Disclosure Standard.¹⁰² The draft standard requires the following:

Information about current and anticipated changes to its business model, including: (1) about changes the entity is making in strategy and resource allocation to address the risks and opportunities ... Examples of these changes include resource allocations resulting from demand or supply changes, or from new business lines; resource allocations arising from business development through capital expenditures or additional expenditure on operations or research and development; and acquisitions and divestments. This information includes plans and critical assumptions for legacy assets, including strategies to manage carbon energy- and water-intensive operations, and to decommission carbon-energy- and water-intensive assets.¹⁰³

24. If a registrant has used carbon offsets or RECs, should we require the registrant to disclose the role that the offsets or RECs play in its overall strategy to reduce its net carbon emissions, as proposed? Should the proposed definitions of carbon offsets and RECs be clarified or expanded in any way? Are there specific considerations about the use of carbon offsets or RECs that we should require to be disclosed in a registrant's discussion regarding how climate-related factors have impacted its strategy, business model, and outlook?

The Commission should require that registrants disclose the role that offsets and RECs play in its overall strategy to reduce their net carbon emissions.

Investors assessing transition risk need to know how significantly companies plan to rely on offsets and RECs as part of their emissions reduction strategies, since these are two common mechanisms used by registrants to meet their climate targets that are often subject to charges of

¹⁰² International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

¹⁰³ *Ibid*, at 35.

manipulation or even fraud.¹⁰⁴ The SEC should clarify that registrants must disclose the role that carbon offsets and RECs play in their strategies regardless of whether they have set an emissions reduction goal or target. Reliance on offsets and RECs poses financial risks to registrants regardless of whether they have goals or targets; for example, many carbon offset suppliers have weak business models due to the oversupply of low-quality credits on the market.

The Proposal's definition should be clarified by adding the underlined text:

Carbon offsets represents an emissions avoidance, reduction, or removal of greenhouse gases (“GHG”) in a manner calculated and traced for the purpose of offsetting or compensating for an entity’s GHG emissions.

This addition clarifies the distinction between two types of climate action for which offset credits are created: the avoidance and reduction of emissions released into the atmosphere and the removal of GHGs from the atmosphere.¹⁰⁵ Adding “avoidance” to the definition better captures the full range of offset projects and the terminology used in the offsets industry. The offsets market differentiates between avoided emissions (for example, avoided deforestation) and reduced emissions (for example, through fuel switching). There are also “mixed” projects, such as integrated forest management projects, where both avoidance and removals offsets may be generated.

The difference between these types of available offsets is material to investors and—as discussed further in response to question 173—will encompass emerging market practices and the evolution of corporate standards that implicate different types of offset credits.

The current formulation of “[O]ffsetting an entity’s GHG emissions” does not say what an offset does. It does not reflect that removals are the only type of offset that, theoretically, could change the *net* carbon emissions of a firm. *Avoidance* and *reduction* offsets may lead to less overall emissions in aggregate, but cannot be said to actually compensate for the ongoing emissions of the registrant and cannot be relied on fully to meet targets.

¹⁰⁴ In its recent sixth assessment report, the IPCC clearly laid out the context for considering whether offsets are compatible with climate action when they noted the amount of estimated cumulative future carbon dioxide emissions committed in existing fossil fuel infrastructure from 2018 until the end of its lifetime is 660 Gt CO₂, which far exceeds the amount of carbon dioxide that could be emitted into the atmosphere within the remaining 1.5°C budget. The principle of offsetting – that one entity keeps emitting while another entity does something of purported climate benefit, such as avoiding emissions or removing emissions – is challenged in the very real context where all entities will need to reduce emissions to stay below Paris targets.

¹⁰⁵ Heuberger, Renat. 2021. “Avoidance and Removal of Carbon Emissions: The Big Misunderstanding.” *Environmental Finance*, November 9, 2021.

<https://www.environmental-finance.com/content/analysis/avoidance-and-removal-of-carbon-emissions-the-big-misunderstanding.html>.

To actually compensate for fossil fuel emissions, which have a lifetime in the atmosphere of hundreds to thousands of years, permanent removals are required. The vast majority of offsets available are not for removals but for avoided or reduced emissions. Removal offsets “retired” to date (i.e., used by companies to claim credit for offsetting emissions) are mostly for forest restoration projects and other land-based carbon sequestration; the benefits of these projects are inherently temporary and increasingly face the risk of near-term reversal from wildfires and other climate-related disruptions. Other more recent removal projects, with offsets not yet retired, are attempting to address these and other integrity concerns with promises of long-duration carbon storage (see the response to question 170). Given the doubts about the benefits of offsets and the rapid changes underway in the offsets market, investors need clarity about registrants’ reliance on offsets, carbon removals resulting from such reliance, and the effects of such reliance on achievement of registrants’ climate goals and targets. Because climate risk varies depending on offset type, the types of offsets that companies are buying is material to the investor, and each type of offset relied upon should be separately disclosed. The response to question 173 identifies specific elements of offset credits that are material to their risk profile, and should be required to be disclosed.

Current carbon market disclosures do not supply key information to investors, creating a substantial risk of information asymmetry and mispricing of risk. Despite the prominence of carbon offsets and RECs in many public companies’ climate strategies, in today’s markets an investor seeking to understand a registrant’s carbon offset and REC use faces substantial barriers due to inconsistent and inadequate voluntary disclosures.¹⁰⁶ For instance, an investor today often cannot ascertain what offsets a company has acquired, or when a company has actually claimed the underlying benefit of the offset. A registrant participating in voluntary offsets markets can decide to report its offset use in one year and then not to disclose at all the next, leaving investors with an inconsistent picture of a company’s activity over time. Inconsistent and incomplete disclosures are highly problematic for investors, as carbon offsets and RECs are fundamental drivers of transition risk to investors. Below are ways that a registrant’s offsets and REC usage impacts several categories of transition risk.

Market and regulatory risk: Today’s carbon offset markets face an uncertain, potentially volatile future, and are a key driver of transition risk to investors. The voluntary markets, where many companies purchase carbon offsets today, are not subject to regulatory oversight and can intersect with risky financial technologies like cryptocurrencies, contributing to speculation and

¹⁰⁶ See, e.g., Frank, Sadie, Danny Cullenward, and Freya Chay. 2022. “Why Carbon Offset Disclosure Matters.” *CarbonPlan* (blog). February 8, 2022. <https://carbonplan.org/blog/offset-disclosure-needs>; Naik, Gautam. 2021. “Problematic Corporate Purchases of Clean Energy Credits Threaten Net Zero Goals.” S&P Global, May 5, 2021. <https://www.spglobal.com/esg/insights/problematic-corporate-purchases-of-clean-energy-credits-threaten-net-zero-goals>. The latter article highlights serious questions among market participants about whether RECs encourage additional renewable energy deployment. Because these concerns are very similar to the additionality problems faced by participants in offsets market, we recommend that the Commission treat offsets and RECs identically in this rulemaking.

arbitrage opportunities.¹⁰⁷ Empirical analysis has also confirmed that depending on the trajectory of future regulation and voluntary efforts, the offset market outlook could change significantly.¹⁰⁸ For instance, the proliferation of net-zero targets¹⁰⁹ has led to an increased focus on carbon removal offsets.¹¹⁰ Since carbon removal tends to be more expensive and faces severe supply constraints,¹¹¹ a market suddenly limited to carbon removal—through regulation or stricter voluntary standards of net-zero requirements—could result in a dramatic increase in prices and a decline in offset availability. This dynamic could also play out if offset programs improve their quality standards by restricting project eligibility and lessening the amount of credits generated by each project. If either of these events happens, companies that have developed strategies based on the assumption of widespread cheap offsets will find themselves effectively exposed to elevated carbon prices, and thus, elevated transition risk.¹¹² They may also find themselves exposed to carbon regulation that offers no credit for such offsets.

The same market and regulatory risk applies to the supply side of the offsets market. Market volatility and uncertainty also affect the suppliers in the offset and RECs industries. Should regulation or market standards change, offset suppliers could face drastic threats to their business viability.

Reputational risk: In addition to market and regulatory risk, offset quality remains a persistent and significant challenge for the offset industry, and is increasingly leading to credibility concerns and reputational risk for market participants that purchase credits of dubious quality. These integrity issues are widespread throughout current markets, and are not currently disclosed to investors. The SEC’s proposed offset disclosure provisions, particularly the offset level information in 1506(d), will fill critical gaps for investors seeking to invest in companies that are using high-quality credits.¹¹³ An investor seeking to mitigate reputational risk can utilize the proposed disclosures to avoid allocating capital to companies heavily invested in low-quality credits.

¹⁰⁷ Badgley, Grayson, and Danny Cullenward. 2022. “Zombies on the Blockchain.” CarbonPlan, April 7, 2022. <https://carbonplan.org/research/toucan-crypto-offsets>.

¹⁰⁸ Bullard, Nathaniel. 2022. “Carbon Offsets Trading Could Go Two Very Different Ways.” *Bloomberg*, January 21, 2022. <https://www.bloomberg.com/news/articles/2022-01-21/carbon-offsets-trading-could-go-two-very-different-ways>.

¹⁰⁹ Energy & Climate Intelligence Unit (ECIU), Data-Driven EnviroLab (DDL), NewClimate Institute, Oxford Net Zero. 2022. “Net Zero Tracker.” Accessed May 11, 2022. <https://zerotracker.net/>.

¹¹⁰ Science Based Targets Initiative (SBTi). 2021. *SBTi Corporate Net-Zero Standard*. SBTi. <https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf>.

¹¹¹ Joppa, Lucas, Amy Luers, Elizabeth Willmott, S. Julio Friedmann, Steven P. Hamburg, and Rafael Broze. 2021. “Microsoft’s Million-Tonne CO₂-Removal Purchase—Lessons for Net Zero.” *Nature* 597, (September): 629–32. <https://www.nature.com/articles/d41586-021-02606-3>.

¹¹² Frank, Sadie, and Danny Cullenward. 2021. “Climate-Related Financial Risk and Corporate Net-Zero Commitments.” *CarbonPlan* (blog). November 1, 2021. <https://carbonplan.org/blog/climate-financial-risks>.

¹¹³ This is because certain categories of credits, for instance, older avoided emissions credits for underlying projects like hydropower, are commonly understood to be at greater risk of representing less robust environmental outcomes.

Investors and market participants have voiced concern about the proliferation of low-quality offsets. According to a TSVCM survey of buyers and prospective buyers of carbon offset credits, 45 percent of those surveyed were concerned about “a lack of environmental and social integrity of certain projects.”¹¹⁴

Studies have found high rates of over-crediting (or inflated credits) from multiple generations of carbon offset programs—cases where offsets were sold that did not represent any environmental impact or represented significantly less real impact than credited to the project. Studies of the world’s largest offset program, the UN’s Clean Development Mechanism, found that large portions of credits do not represent real additional emissions reductions.¹¹⁵ One overarching study estimates only two percent of projects have a high likelihood of ensuring environmental integrity.¹¹⁶ High rates of over-crediting have also been found in California’s offset program. The state’s forest offset protocol, generating 82 percent of the state program’s offset credits, and half of all offset credits from projects in the United States, has been found to over-credit from the methods used to set baselines (resulting in 30 percent over-crediting) and leakage (resulting in 50-82 percent over-crediting).¹¹⁷ Studies of other voluntary and compliance market protocols have also found high rates of over-crediting across many other project types, including soil projects, cookstoves, avoided deforestation, and landfill gas capture.¹¹⁸ Projects also have been

¹¹⁴ Task Force on Scaling Voluntary Carbon Markets (TSVCM). 2021. *Public Consultation Report*. Washington, DC: Institute of International Finance. https://www.iif.com/Portals/1/Files/TSVCM_Public_Consultation.pdf, at 50.

¹¹⁵ He, Gang, and Richard Morse. 2014. “Addressing Carbon Offsetters’ Paradox: Lessons from Chinese Wind CDM.” *Energy Policy* 63, (December): 1051–5. <https://doi.org/10.1016/j.enpol.2013.09.021>; Wara, Michael. 2008. “Measuring the Clean Development Mechanism’s Performance and Potential.” *UCLA Law Review* 55, (August): 1759–803.

<https://www.uclalawreview.org/measuring-the-clean-development-mechanisms-performance-and-potential/>; Fearnside, Philip M. 2013. “Credit for Climate Mitigation by Amazonian Dams: Loopholes and Impacts Illustrated by Brazil’s Jirau Hydroelectric Project.” *Carbon Management* 4, no. 6: 681–96. <https://doi.org/10.4155/cmt.13.57>; Haya, Barbara. 2010. “Carbon Offsetting: An Efficient Way to Reduce Emissions or to Avoid Reducing Emissions? An Investigation and Analysis of Offsetting Design and Practice in India and China.” Doctoral dissertation. Energy & Resources Group, University of California. <https://escholarship.org/content/qt7jk7v95t/qt7jk7v95t.pdf>.

¹¹⁶ Cames, Martin, Ralph O. Harthan, Jürg Füssler, Michael Lazarus, Carrie M. Lee, Pete Erickson, and Randall Spalding-Fecher. 2016. *How Additional Is the Clean Development Mechanism?* Freiburg, Germany: Institute for Applied Ecology. https://ec.europa.eu/clima/system/files/2017-04/clean_dev_mechanism_en.pdf.

¹¹⁷ Badgley, Grayson, Jeremy Freeman, Joseph J. Hamman, Barbara Haya, Anna T. Trugman, William R. L. Anderegg, and Danny Cullenward. 2021. “Systematic Over Crediting in California’s Forest Carbon Offsets Program.” *Global Change Biology* 28, no. 4 (October): 1433–45. <https://doi.org/10.1111/gcb.15943>; Haya, Barbara. 2019. “Policy Brief: The California Air Resources Board’s U.S. Forest Offset Protocol Underestimates Leakage.” University of California, Berkeley, May 7, 2019.

https://gspp.berkeley.edu/assets/uploads/research/pdf/Policy_Brief-US_Forest_Projects-Leakage-Haya_4.pdf.

¹¹⁸ Macintosh, Andrew. 2022. “The Emissions Reduction Fund’s Landfill Gas Method: An Assessment of its Integrity.” The Australian National University, Canberra, March 16, 2022. https://law.anu.edu.au/sites/all/files/erf_landfill_gas_method_-_an_assessment_of_its_integrity_16_march_2022.pdf

; Zelikova, Jane, Freya Chay, Jeremy Freeman, and Danny Cullenward. 2021. “A Buyer’s Guide to Soil Carbon Offsets.” CarbonPlan, July 15, 2021. <https://carbonplan.org/research/soil-protocols-explainer>; West, Thales A. P., Jan Börner, Erin O. Sills, and Andreas Kontoleon. 2020. “Overstated Carbon Emissions Reductions from Voluntary REDD+ Projects in the Brazilian Amazon.” *Proceedings of the National Academy of Sciences* 117, no. 39 (September): 24188–194. <https://www.pnas.org/doi/full/10.1073/pnas.2004334117>; Bailis, Rob, Yiting Wang, Rudi Drigo, Adrian Ghilardi, and Omar Masera. 2017. “Getting the Numbers Right: Revisiting Woodfuel Sustainability in

found to have negative impacts on marginalized communities where safeguards and informed consent are not adequately performed.¹¹⁹

Over the last several years many investigative reports have been published on poor-quality offset projects.¹²⁰ This growing public, investor, and regulator awareness of problems with specific offset projects and project types compounds reputational risk to companies that use carbon offsets. Integrity concerns can also intersect with other risks. For instance, if many credits are found to lack integrity, prices of quality credits can increase, making climate mitigation goals more costly to achieve.

Litigation risk: Companies that use offsets to meet legal obligations—such as to cover GHG increases from new construction under the California Environmental Quality Act (CEQA)—face litigation risks from using offsets. For example, building developers in San Diego County, California, were sued based on the lack of substantial evidence that the offsets they purchased from the voluntary offset market mitigated their GHG emissions.¹²¹

the Developing World.” *Environmental Research Letters* 12, no. 11 (October): 115002.
<https://doi.org/10.1088/1748-9326/aa83ed>.

¹¹⁹ Berk, Norah, and Prince Lungungu. 2020. *REDD-Minus: The Rhetoric and Reality of the Mai Ndombe REDD+ Programme*. London: Rainforest Foundation UK.

<https://www.rainforestfoundationuk.org/media.ashx/redd-minus.pdf>; Devine, Jennifer. 2014. “Counterinsurgency Ecotourism in Guatemala’s Maya Biosphere Reserve.” *Environment and Planning D: Society and Space* 32, no. 6 (January): 984–1001. <https://doi.org/10.1068/d13043p>; Milne, Sarah, Sango Mahanty, Phuc To, Wolfram Dressler, Peter Kanowski, and Maylee Thavat. 2019. “Learning From ‘Actually Existing’ REDD+: A Synthesis of Ethnographic Findings.” *Conservation and Society* 17, no. 1 (2019): 84–95.

<https://www.environmentandsociety.org/mml/learning-actually-existing-redd-synthesis-ethnographic-findings>.

¹²⁰ White, Natasha, and Akshat Rathi. 2022. “China Says the 2022 Winter Olympics Are Carbon Neutral. They Aren’t.” *Bloomberg*, February 16, 2022, sec. Energy & Science.

<https://www.bloomberg.com/news/articles/2022-02-16/beijing-olympics-carbon-neutral-claim-is-based-on-junk-offsets>; Song, Lisa, and James Temple. 2021. “A Nonprofit Promised to Preserve Wildlife. Then it Made Millions Claiming it Could Cut Down Trees.” *MIT Technology Review*, May 10, 2021.

<https://www.technologyreview.com/2021/05/10/1024751/carbon-credits-massachusetts-audubon-california-logging-co2-emissions-increase/?truid=f0bbe964b0ec5551e17eadca3e0e4e35>; Hodgson, Camilla. 2021. “Rush for Carbon Credits Spurs Surge in Power Company Schemes.” *Financial Times*, April 17, 2021.

<https://www.ft.com/content/93cb7744-529d-4c74-bbb8-5a9bc8d6b321>; Elgin, Ben. 2020. “These Trees Are Not What They Seem: How the Nature Conservancy, the World’s Biggest Environmental Group, Became a Dealer of Meaningless Carbon Offsets.” *Bloomberg Green*, December 9, 2020.

<https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets-trees/>; Mider, Zachary R., and John Quigley. 2020. “Disney’s Jungle Cruise: High-Emission Vacations Lead to Trouble in a Rainforest Far, Far Away.” *Bloomberg*, June 9, 2020. <https://www.bloomberg.com/graphics/2020-disney-peru-deforestation/>; Song, Lisa. 2019. “An (Even More) Inconvenient Truth: Why Carbon Credits For Forest Preservation May Be Worse Than Nothing.” *ProPublica*, May 22, 2019.

<https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/>.

¹²¹ *Golden Door Properties, LLC v. County of San Diego*. 2020. Cal. Ct. App.; *Elfin Forest Harmony Grove Town Council v. County of San Diego*. 2021. Cal. Ct. App.; Smith, Joshua Emerson. 2020. “Court Tosses San Diego County Climate Plan, Calls Carbon-Offset Program ‘Unlawful.’” *Los Angeles Times*, June 17, 2020.

<https://www.latimes.com/california/story/2020-06-17/court-san-diego-carbon-offset-plan>.

Community conflict and human rights violations: Finally, both litigation and reputational risks can be exacerbated by the potential for conflicts with communities that inhabit areas of land used as offset tracts. As much as 80 percent of land-based carbon mitigation potential is located in developing and least-developed countries,¹²² and the establishment of offset programs can create conflicts with Indigenous and local peoples that live in these areas. One such example is the Cordillera Azul National Park in the Peruvian Amazon, which is currently facing a legal challenge from Indigenous Kichwa communities who were not properly consulted during the formation of the project.¹²³ As a result, the validity of the offset credits generated by this project is in question, creating material legal and reputational risks for the companies that purchased them that may significantly decrease the share price of registrants involved in the project and the value of the investor’s position in those shares.

The items identified here indicate that investors need consistent, comparable, and reliable disclosures of carbon offsets and RECs to assess their transition risks. The SEC’s proposed provisions will improve the information available to investors, but should be strengthened in the ways identified here.

25. Should we require a registrant to provide a narrative discussion of whether and how any of its identified climate-related risks have affected or are reasonably likely to affect its consolidated financial statements, as proposed? Should the discussion include any of the financial statement metrics in proposed 17 CFR 210.14-02 (14-02 of Regulation S-X) that demonstrate that the identified climate-related risks have had a material impact on reported operations, as proposed? Should the discussion include a tabular representation of such metrics?

The Commission should require that registrants provide a narrative discussion of whether and how any of their identified climate-related risks have affected or are reasonably likely to affect their consolidated financial statements, as proposed.

Qualitative disclosure in Regulation S-K is needed to help investors understand management’s view of, and responses to, risks to the registrant’s business and financial performance. An important part of this is helping investors understand how management views the realized or potential impacts of these risks on a company’s consolidated financial statements. This narrative is critical to help investors use and assess the financial statement data provided in Regulation

¹²² Roe, Stephanie, et al. 2021. “Land-Based Measures to Mitigate Climate Change: Potential and Feasibility by Country.” *Global Change Biology* 27, no. 23 (October): 6025–58.
<https://onlinelibrary.wiley.com/doi/10.1111/gcb.15873>.

¹²³ Forest Peoples Programme. “Press Release: Indigenous Kichwa Community Take Peruvian State and National Park to Court.” Press release, July 1, 2021.
<https://www.forestpeoples.org/en/press-release/kichwa-take-Peru-state-PNAZ-court>.

S-X, including the additional disclosures required by this Proposal. Providing it will also make it easier to compare financial statement metrics across registrants and help inform the questions that investors and analysts can pose to management about climate risk management. This is particularly important since the Commission has not dictated specific assumptions about how to incorporate climate risks into the financial statements. Narrative discussion will help investors understand how those risks are actually understood and incorporated.

Standard setters like the TCFD recognize this need and encourage issuers to provide a wide range of contextual information in conjunction with their financial standards. Similarly, the draft IFRS climate disclosure standard emphasizes the need to present climate-related disclosures in a way that lets investors and other market participants understand the relationship with general purpose financial disclosures.¹²⁴

26. Should we require registrants to disclose information about an internal carbon price if they maintain one, as proposed? If so, should we require that the registrant disclose:

- a. The price in units of the registrant’s reporting currency per metric ton of CO₂e;***
- b. The total price;***
- c. The boundaries for measurement of overall CO₂e on which the total price is based if different from the GHG emission organizational boundary required pursuant to 17 CFR 210.14-03(d)(4); and***
- d. The rationale for selecting the internal or shadow carbon price applied, as proposed?***

Should we also require registrants to describe the methodology used to calculate its internal carbon price?

The Commission should require that registrants disclose information about an internal carbon price if they maintain one, as proposed, including the price in units, total price, boundaries for measurement, rationale, and methodology.

According to CDP, internal carbon pricing “has emerged as an important mechanism to help companies manage risks and capitalize on emerging opportunities in the transition to a low-carbon economy.”¹²⁵ As a risk-management tool, internal carbon pricing has many applications. Use of this tool provides information to investors regarding a registrant’s risk

¹²⁴ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 7.

¹²⁵ CDP Global. 2017. *Putting a Price on Carbon: Integrating Climate Risk Into Business Planning*. London: CDP.
<https://www.actu-environnement.com/media/pdf/news-29828-prix-carbone-entreprises-cdp.pdf>, at 5.

preparedness and can also shed light on the financial statements.

According to a survey by CDP, many companies are impacted or are likely to be impacted by domestic or subnational carbon pricing regulations in a given jurisdiction, as well as the possible future establishment of a global carbon tax system.¹²⁶ Registrants that have not begun using internal carbon pricing could find themselves increasingly vulnerable due to “their failure to internalize the cost into their business.”¹²⁷ Accordingly, “investors may question the risk-preparedness of these companies for climate regulations.” Additionally, some investors may have their own projections and assumptions regarding carbon price and need carbon price disclosures from firms so they can contextualize registrants’ financial projections and assess the quality of earnings. The use of internal carbon pricing, therefore, can provide important information to investors regarding the quality of risk management applied to climate-related issues, including risks posed by future climate-related emissions targeted regulation or policy change. The Center for Climate and Energy Solutions also argues that the use of internal carbon pricing can communicate important information to investors:

Companies are under increasing pressure from key stakeholders, including investors, to not only measure and report their carbon footprint but also to demonstrate how climate-related risks and opportunities are identified, assessed, and adequately managed. An internal carbon price can communicate to investors how a company is managing the shift from high-carbon to low-carbon activities.¹²⁸

According to CDP, use of internal carbon pricing is rapidly expanding across companies:

Internal carbon pricing helps a company model its business prospects across different scenarios and CDP’s latest data from 2020 shows an 80% increase in just five years, with more than 2,000 companies now disclosing current or planned uses of internal carbon pricing to CDP. The combined market capitalization of these companies now exceeds US\$27 trillion, a significant increase from US\$7trillion at the time of CDP’s most recent report in 2017.¹²⁹

Registrants are making greater use of internal carbon pricing not just as a tool for risk management, but also as a way to identify climate-related opportunities. According to the Center for Climate and Energy Solutions, “Internal carbon pricing can shift investment to low carbon options, spur investment in innovation, and screen for new market opportunities that can increase

¹²⁶ *Ibid.*

¹²⁷ *Ibid.*, at 5.

¹²⁸ CDP Global. 2021. *Putting a Price on Carbon: The State of Internal Carbon Pricing by Corporates Globally*. London: CDP.

https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/651/original/CDP_Global_Carbon_Price_report_2021.pdf?1618938446, at 7.

¹²⁹ *Ibid.*, at 6.

a company's competitiveness."¹³⁰

Internal carbon pricing is also a critical input into financial statements. It is helpful to understanding projected valuation of assets and capital expenditure assessments. According to Ceres, internal carbon pricing is also relevant to impairment testing and the timing of asset-retirement obligations.¹³¹ The disclosure of an internal carbon price helps investors by providing contextual information necessary to understanding various elements of financial statements. As discussed in subsequent responses, the disclosure of these sorts of inputs is invaluable to investors as it allows them to assess the reasonableness of figures presented in financial statements.

Similar logic should compel the disclosure of methodology as well as detailed inputs into the internal carbon pricing tool such as the price in units of the registrant's reporting currency per metric ton of CO₂e, boundaries for measurement, total price, and rationale. This information is critical to assessing and evaluating the internal carbon price used by a registrant and provides the contextual information necessary to fully understand the tool and any models arising out of its use.

27. Should we also require a registrant to disclose how it uses the described internal carbon price to evaluate and manage climate-related risks, as proposed? Should we further require a registrant that uses more than one internal carbon price to provide the above disclosures for each internal carbon price, and disclose its reasons for using different prices, as proposed? Are there other aspects regarding the use of an internal carbon price that we should require to be disclosed? Would disclosure regarding any internal carbon price maintained by a registrant elicit important or material information for investors? Would requiring the disclosure of the registrant's use of an internal carbon price raise competitive harm concerns that would act as a disincentive from the use of an internal carbon price? If so, should the Commission provide an accommodation that would mitigate those concerns? For example, are there exceptions or exemptions to an internal carbon price disclosure requirement that we should consider?

The Commission should require a registrant to disclose how it uses the described internal carbon price to evaluate and manage climate-related risks, as proposed, as well as require that a registrant disclose each internal carbon price in the case of a registrant using more than one.

¹³⁰ Ahluwalia, Manjyot Bhan. 2017. *The Business of Pricing Carbon: How Companies Are Pricing Carbon to Mitigate Risks and Prepare for a Low-Carbon Future*. Arlington County, VA: Center for Climate and Energy Solutions. <https://www.c2es.org/wp-content/uploads/2017/09/business-pricing-carbon.pdf>, at 8.

¹³¹ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres. <https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>, at 9.

Internal carbon pricing is a risk-management and strategic-planning tool. It is used to *inform* planning. Along with disclosure of the internal carbon price, investors need to understand how the price is used to inform internal decisions. This aligns with the draft IFRS Sustainability Disclosure Standard, which states that along with the disclosure of the internal carbon price used, a firm should provide “an explanation of how the entity is applying the carbon price in decision-making (for example, investment decisions, transfer pricing and scenario analysis).”¹³²

Disclosure of the use of internal carbon prices within business planning is just as important as disclosure of the price itself. CDP explains:

While it is important to understand the assumptions of an internal carbon price, it is equally important to understand if and how it is impacting business decisions. Key indicators of whether an internal carbon price is meaningful include the scope of greenhouse gas emissions it applies to, whether it is embedded into operational as well as capital spend decisions, and the degree of overall influence that it has on decision-making.¹³³

This requirement and proposed disclosure is an important accompaniment to the required disclosure regarding internal carbon prices and will help improve the efficacy of the internal carbon price disclosure and its overall usefulness to investors.

29. Should we require all registrants to disclose an internal carbon price and prescribe a methodology for determining that price? If so, what corresponding disclosure requirements should we include in connection with such mandated carbon price? What methodology, if any, should we prescribe for calculating a mandatory internal or shadow carbon price? Would a different metric better elicit disclosure that would monetize emissions?

The Commission need not require that all registrants disclose an internal carbon price or prescribe a methodology for determining an internal carbon price.

In cases where a registrant uses an internal carbon price and therefore must disclose it, the registrant should also be required to disclose its methodology. This would more closely align

¹³² International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 42.

¹³³ CDP Global. 2017. *Putting a Price on Carbon: Integrating Climate Risk Into Business Planning*. London: CDP.
<https://www.actu-environnement.com/media/pdf/news-29828-prix-carbone-entreprises-cdp.pdf>, at 5.

with the TCFD reporting framework.¹³⁴ Requiring disclosure of the methodology is sufficient and preferable to prescribing a methodology for all registrants.

30. Should we require a registrant to disclose analytical tools, such as scenario analysis, that it uses to assess the impact of climate-related risks on its business and consolidated financial statements, and to support the resilience of its strategy and business model, as proposed? What other analytical tools do registrants use for these purposes, and should we require disclosure of these other tools? Are there other situations in which some registrants should be required to conduct and provide disclosure of scenario analysis? Alternatively, should we require all registrants to provide scenario analysis disclosure? If a registrant does provide scenario analysis disclosure, should we require it to follow certain publicly available scenario models, such as those published by the IPCC, the IEA, or NGFS and, if so, which scenarios? Should we require a registrant providing scenario analysis disclosure to include the scenarios considered (e.g., an increase of global temperature of no greater than 3°, 2°, or 1.5°C above pre-industrial levels), the parameters, assumptions, and analytical choices, and the projected principal financial impacts on the registrant’s business strategy under each scenario, as proposed? Are there any other aspects of scenario analysis that we should require registrants to disclose? For example, should we require a registrant using scenario analysis to consider a scenario that assumes a disorderly transition? Is there a need for us to provide additional guidance regarding scenario analysis? Are there any aspects of scenario analysis in our proposed required disclosure that we should exclude? Should we also require a registrant that does not use scenario analysis to disclose that it has not used this analytical tool? Should we also require a registrant to disclose its reasons for not using scenario analysis? Will requiring disclosure of scenario analysis if and when a registrant performs scenario analysis discourage registrants from conducting scenario analysis? If so, and to the extent scenario analysis is a useful tool for building strategic resilience, how could our regulations prevent such consequences?

The Commission should require that a registrant disclose analytical tools, such as scenario analysis, that it uses to assess the impact of climate-related risks on its business and consolidated financial statements, and to support the resilience of its strategy and business model, as proposed.

In cases where a registrant uses scenario analysis or another analytical tool for this purpose, the

¹³⁴ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>, at 21. (“Where relevant, organizations should provide their internal carbon prices as well as climate-related opportunity metrics such as revenue from products and services designed for a lower-carbon economy. Metrics should be provided for historical periods to allow for trend analysis. In addition, where not apparent, organizations should provide a description of the methodologies used to calculate or estimate climate-related metrics.”)

Commission should require registrants to disclose the scenarios considered where applicable (e.g., an increase of global temperature of no greater than 3°, 2°, or 1.5°C above pre-industrial levels) as well as the parameters, assumptions, analytical choices, and projected principal financial impacts on the registrant’s business strategy, as proposed. This requirement is preferable to requiring all registrants to use a specific scenario or scenario models.

Scenario analysis has emerged as a key analytical tool for assessing the potential impacts of climate change because it allows market participants to understand multiple possible outcomes while still reflecting a realistic level of uncertainty.¹³⁵ This method helps to deliver information to investors within an appropriate framework of uncertainty.

Scenario analysis is particularly useful in the context of understanding the impacts of climate change given its uncertain trajectory. Investors cannot take management at its word in a setting of such unpredictability with so many unknowns. They need to understand a company’s future in a wide range of possible outcomes considered by management. In addition, a registrant should be allowed to include its assessment of the likelihood of various scenarios, to help investors understand the registrant’s expectations.

Scenario analysis is not a novel or uncommon tool. According to the International Sustainability Standards Board (ISSB): “Many entities use scenario analysis in risk management for other purposes. Where robust data and practices have developed, entities thus have the analytical capacity to undertake scenario analysis.”¹³⁶ The ISSB also argues that for some sectors, using specific climate-related scenario analysis is already common practice. “Some sectors, such as extractives and minerals processing, have used climate-related scenario analysis for many years.”¹³⁷ However, climate-related specific scenario analysis methodologies across sectors are still evolving, which means it is important for registrants to also disclose the details about their analytical choices required by the Proposal.

The TCFD explains the importance of climate-related scenario analysis in its disclosure guidance:

Efforts to mitigate and adapt to climate change are without historical precedent, and many aspects about the timing and magnitude of climate change in specific contexts are uncertain. For these reasons, the Task Force believes scenario analysis is an important

¹³⁵ Condon, Madison. 2021. “Market Myopia’s Climate Bubble.” *Utah Law Review* 63, *Boston University School of Law Research Paper*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782675, at 52. (Scenario analysis “delivers information about risk exposures in different future possible states of the world, without assigning probability to those futures.”)

¹³⁶ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>, at 17.

¹³⁷ *Ibid*, at 17.

tool for organizations to use in their strategic planning processes. Scenario analysis and other strategic planning tools can help organizations consider a broader range of assumptions, uncertainties, and potential future states when assessing financial implications of climate change.¹³⁸

The consideration of “potential future states” is critically important as part of risk management since mispricing of climate risk often arises out of market actors’ reliance on “strategies that expose them to *model risk*, such as relying on unrepresentative historical records to project future exposure.”¹³⁹

According to Condon (2021), risk metrics based on backward-looking data are one of the biggest causes of mispricing of climate risks throughout the market:

The traditional methods by which market actors assess risk may be particularly prone to failure in a climate-changed world. Financial models, including those impacting capital-allocation decisions within corporations, often rely on historical data to make future projections of risk. In the climate context, the future will look very different from the past in myriad ways. Historical data representing a relatively stable climate past cannot be relied upon to predict future risks.¹⁴⁰

This point highlights the core importance of scenario analysis disclosures. They protect investors from undue risk taken by a firm by allowing investors to review the general models and projections used by a firm in its planning and capital allocation strategy. According to the TCFD, investors want scenario analysis in order to assess core business information and project a firm’s future value:

The TCFD also found that investors want to understand what the outcomes indicate about the resilience of the entity’s strategy, business model and future cash flows to a range of future climate scenarios (including whether the entity has used a scenario aligned with the latest international agreement on climate change).¹⁴¹

In fact, investors have specifically sought detailed information regarding scenario analysis including assumptions and inputs used as well as the application of scenario analysis to strategy and risk management.¹⁴²

¹³⁸ *Ibid*, at 12.

¹³⁹ Condon, Madison. 2021. “Market Myopia’s Climate Bubble.” *Utah Law Review* 63, *Boston University School of Law Research Paper*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782675, at 19.

¹⁴⁰ *Ibid*, at 18.

¹⁴¹ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation. <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 17.

¹⁴² *Ibid*, at 17.

Unlike the Proposal, the draft IFRS standard requires scenario analysis to be conducted and the results disclosed unless an entity is unable to use this tool for some reason. “If an entity is unable to use climate-related scenario analysis, it shall use an alternative method or technique to assess its climate resilience.”¹⁴³ In the standard, the ISSB explains the need for some level of flexibility while climate-related scenario analysis methodologies across sectors are in development. The ISSB requirements “are designed to accommodate alternative approaches to resilience assessment, such as qualitative analysis, single-point forecasts, sensitivity analysis and stress tests.”¹⁴⁴

Scenario analysis is an invaluable tool that, when disclosed, can greatly assist investors in understanding a firm’s resilience and assumptions about the effects of climate change. But, as the ISSB recognizes, there may be other modeling tools used by firms that warrant disclosure. The credibility of forward-looking assessments must ultimately be judged by investors, using the information disclosed by registrants pursuant to the Proposal. Therefore, the SEC should require, as proposed, that registrants disclose the analytical tools, *such as* scenario analysis, that they use to assess the impact of climate-related risks.

The Commission does not need to provide additional guidance on scenario analysis, or select which scenarios registrants should use, as long as these choices and results are clearly described within SEC filings.

32. Should we adopt a provision similar to 17 CFR 229.305(d) that would apply the PSLRA forward-looking statement safe harbor to forward-looking statements made in response to specified climate-related disclosure items, such as proposed Item 1502 and Item 1505 (concerning targets and goals) of Regulation S-K? If so, which proposed items should we specifically include in the safe harbor?

The Commission does not need to adopt any additional provisions to apply the Private Securities Litigation Reform Act (PSLRA) forward-looking statement safe harbor to forward-looking statements made in response to specified climate-related disclosure items.

Forward-looking climate disclosure statements are not fundamentally different from other forward-looking statements, and should be subject to the same safe harbors. There are other parts of the proposed climate-related disclosure items that require disclosure of historical or current data or information, which should not be protected by the PSLRA safe harbor. Registrants should clearly identify the forward-looking statements for climate-related disclosure items as such, and accompany them with meaningful cautionary statements identifying important factors that could

¹⁴³ *Ibid.*, at 18.

¹⁴⁴ *Ibid.*, at 18.

cause actual results to differ materially from those in the forward-looking statement, as laid out in 15 U.S.C. § 78u-5.

However, should the Commission decide to adopt an additional provision for the application of the PSLRA forward-looking statement safe harbor to climate-related disclosures, it should not apply that safe harbor to certain sections.

Section 229.1502(b) asks for a description of actual and potential impacts of any identified climate-related risks; under this provision, actual impacts should not be protected by the PSLRA safe harbor. Section 229.1502(c) asks for “current and forward-looking disclosures that facilitate an understanding of whether the implications of the identified climate-related risks have been integrated into the registrant’s business model or strategy.”¹⁴⁵ Here the Commission has been clear that a registrant should distinguish between current and forward-looking disclosures, and therefore is clear where PSLRA safe harbors will apply. Section 229.1502(d) asks for a narrative discussion of whether and how climate-related risks have affected or are reasonably likely to affect the registrant’s consolidated financial statements; this discussion should not be protected by the safe harbor.

The PSLRA forward-looking statement safe harbor only applies to forward-looking statements, and therefore many specified climate-related disclosure items, such as proposed Item 1505—“Attestation of Scope 1 and Scope 2 emissions disclosure” (§ 229.1505)—should not have PSLRA safe harbor protections, nor should any additional provisions be adopted by the Commission for items that are not forward looking (at FR 21469-21471).

In section 229.1506, targets and goals, the Commission should clarify that a registrant must make clear which aspects are forward looking.¹⁴⁶ The PSLRA forward-looking statement safe harbor should not apply to historical and current data used in relation to GHG emissions reductions or other climate-related targets or goals in proposed item 1506. In particular, sections § 229.1506(c), data on progress toward meeting a target or goal, and § 229.1506(d), past acquisitions or retirements of carbon offsets or RECs, refer to historical and current data and information that should not be protected by the PSLRA safe harbor.

The Commission should reaffirm that filed statements that are intentionally false or misleading are not protected by the PSLRA safe harbor, that registrants and auditors are expected to ensure that forward-looking statements are not misleading and contain appropriate context to prevent them from being so. The Commission should also engage in enhanced monitoring of forward-looking statements to ensure registrants are providing information and projections that are not false or misleading, and take enforcement action where appropriate.

¹⁴⁵ Proposal at 21467

¹⁴⁶ Proposal at 21471

36. Should we require a registrant to disclose whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight, as proposed? Would the proposed disclosure raise competitive harm concerns? If so, how could we address those concerns while requiring additional information for investors about how a registrant’s board oversees climate-related risks?

The Commission should require registrants to disclose whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight, as proposed.

Board engagement is one helpful proxy for assessing a registrant’s overall approach to climate-related risk management. It is critical that investors understand if and how senior leadership is involved in decisions related to climate-related risks. Investors also need to know if senior leadership *is not* involved, as this could signal a lack of organizational focus on the issue.

Global standards currently include this requirement, so there is no evident competitive-harm concerns in adopting it. The TCFD requires the following disclosures in this area:

Whether the board and/or board committees consider climate-related issues when reviewing and guiding strategy, major plans of action, risk management policies, annual budgets, and business plans as well as setting the organization’s performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions, and divestitures.¹⁴⁷

Similarly, the IFRS draft standard requires disclosure of “how the body and its committees consider climate-related risks and opportunities when overseeing the entity’s strategy, its decisions on major transactions, and its risk management policies, including any assessment of trade-offs and analysis of sensitivity to uncertainty that may be required.”¹⁴⁸

37. Should we require a registrant to disclose whether and how the board sets climate-related targets or goals, as proposed? Should the required disclosure include how the board oversees progress against those targets or goals, including whether it establishes any interim targets or

¹⁴⁷ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>, at 17.

¹⁴⁸ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation. <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 33.

goals, as proposed? Would the proposed disclosure raise competitive harm concerns? If so, how could we address those concerns while requiring additional information for investors about how a registrant’s board oversees the setting of any climate-related targets or goals?

The Commission should require registrants to disclose whether and how their board sets climate-related targets or goals, as proposed. The required disclosure should include how the board oversees progress against those targets or goals, including whether it establishes any interim targets or goals, as proposed.

Investors need information not just on climate-related risks identified by a registrant, but also on how a registrant plans to respond to these risks, at the highest level of its governance—the board of directors. As is the case with all risk management, a registrant’s responses and adaptation to risks can be a key factor in defining competitive edge, especially for sectoral and systematic risks. All firms may face climate risks, but not all firms will handle these risks in the same way. Investors therefore need insight into a registrant’s plans to mitigate or adapt to climate-related risks in order to compare future viability across firms and make investment decisions accordingly.

This aligns with the recommendations of the TCFD reporting framework, which says in its guidance for all sectors that, “In describing the board’s oversight of climate-related issues, organizations should consider including ... how the board monitors and oversees progress against goals and targets for addressing climate-related issues.”¹⁴⁹

This climate-related governance structure is common, and disclosure is feasible. The TCFD’s 2021 Status Report found that about 20 percent of North American public companies disclosed information on board oversight.¹⁵⁰ But this shortfall shows the current voluntary reporting regime has been inadequate in producing these disclosures consistently, so mandatory disclosures are essential to produce standardized and comparable information for investor decision-making.

The proposed disclosure should not raise competitive-harm concerns given that a growing number of countries, including G7 nations, are moving toward TCFD-aligned mandatory disclosures for companies and financial institutions.^{151,152} In addition, the Proposal would not

¹⁴⁹ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD.

<https://www.fsb.org/wp-content/uploads/P141021-4.pdf>, at 17.

¹⁵⁰ Task Force on Climate-Related Financial Disclosures. 2021. *2021 Status Report*. TCFD.

<https://www.fsb.org/wp-content/uploads/P141021-1.pdf>.

¹⁵¹ Naik, Gautam. 2021. “Companies, Investors Face New Pressure from Compulsory Disclosure of Climate Risk.” S&P Global, August 25, 2021.

<https://www.spglobal.com/esg/insights/companies-investors-face-new-pressure-from-compulsory-disclosure-of-climate-risk>.

¹⁵² Caswell, Graham. 2021. “G7 Nations Agree on Mandatory Climate-Related Disclosure.” Green Central Banking, June 8, 2021. <https://greencentralbanking.com/2021/06/08/g7-nations-mandatory-climate-related-disclosure/>.

require disclosure of any proprietary information. Many registrants are already voluntarily disclosing target- and goal-based information through a variety of global frameworks, which would not occur voluntarily if doing so threatened competitive harm.

38. Should we require a registrant to describe, as applicable, management’s role in assessing and managing climate-related risks, as proposed? Should the required disclosure include whether certain management positions or committees are responsible for assessing and managing climate-related risks and, if so, the identity of such positions or committees, and the relevant expertise of the position holders or members in such detail as necessary to fully describe the nature of the expertise, as proposed? Should we require a registrant to identify the executive officer(s) occupying such position(s)? Or do our current rules, which require a registrant to provide the business experience of its executive officers, elicit adequate disclosure about management’s expertise relevant to the oversight of climate-related risks?

The Commission should require that registrants describe, as applicable, management’s role in assessing and managing climate-related risks, including whether certain management positions or committees are responsible for assessing and managing climate-related risks and, if so, the identity of such positions or committees, and the relevant expertise of the position holders or members.

This aligns with the existing TCFD standard and the emerging ISSB reporting requirements. Where appropriate, broad alignment is effective as a means to foster consistency and comparability across registrants.

39. Should we require a registrant to describe the processes by which the management positions or committees responsible for climate-related risks are informed about and monitor climate-related risks, as proposed? Should we also require a registrant to disclose whether and how frequently such positions or committees report to the board or a committee of the board on climate-related risks, as proposed?

The Commission should require that registrants describe the processes by which the management positions or committees responsible for climate-related risks are informed about and monitor climate-related risks, including whether and how frequently such positions or committees report to the board or a committee of the board on climate-related risks, as proposed.

This disclosure will allow investors and other interested market participants to better understand the ongoing management of climate-related risks, including the internal systems used to communicate these risks to the highest levels of management and the board on a regular basis.

This information is important to understanding the quality of a registrant’s overall risk-management systems and whether climate-related risks are afforded adequate attention at the highest levels of decision-making and governance.

40. Should we specifically require a registrant to disclose any connection between executive remuneration and the achievement of climate-related targets and goals? Is there a need for such a requirement in addition to the executive compensation disclosure required by 17 CFR 229.402(b)?

The Commission should require registrants to disclose any connection between executive remuneration and the achievement of climate-related targets and goals.

It also should require disclosure of executive compensation or incentives tied to outcomes that are *in opposition* to any disclosed climate-related targets or goals. For example, some firms reward executives by the operational hours of high-emissions sources, or the acquisition of high-emissions potential resources. To the extent that these same firms have established climate-related targets, the conflict between executive compensation incentives and corporate goals matter to investors.

Executive remuneration tied to climate-related targets and goals should be disclosed in annual SEC filings in the newly proposed, separately captioned “Climate-Related Disclosure” section and in the financial statements. Registrants should already disclose material incentives and metrics tied to executive remuneration for the purposes of clarifying executive incentive structures pursuant to 17 CFR 229.402(b).¹⁵³

The draft IFRS standard says that, as part of providing investors the information they need to assess how an entity manages climate-related risks and opportunities, the entity should disclose remuneration linked to climate-related considerations and a description of how climate-related considerations factor into remuneration.¹⁵⁴ Current reporting requirements for foreign private issuers are aligned with IFRS frameworks and standards, and foreign private issuers will likely be required to comply with the proposed climate disclosure draft to be issued by ISSB tentatively by the end of 2022. That means this standard will soon apply to U.S. companies that are also listed outside the U.S., and alignment is appropriate and would incur minimal additional cost.

¹⁵³ Securities and Exchange Commission (SEC). 2011. “CFR-2011-title17-vol2-sec229-402.”

<https://www.govinfo.gov/content/pkg/CFR-2011-title17-vol2/pdf/CFR-2011-title17-vol2-sec229-402.pdf>.

¹⁵⁴ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.

<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>, at 43.

43. When describing the processes for identifying and assessing climate-related risks, should we require a registrant to disclose, as applicable, as proposed: • How the registrant determines the relative significance of climate-related risks compared to other risks? • How it considers existing or likely regulatory requirements or policies, such as emissions limits, when identifying climate-related risks? • How it considers shifts in customer or counterparty preferences, technological changes, or changes in market prices in assessing potential transition risks? • How the registrant determines the materiality of climate-related risks, including how it assesses the potential size and scope of an identified climate-related risk? Are there other items relevant to a registrant’s identification and assessment of climate-related risks that we should require it to disclose instead of or in addition to the proposed disclosure items?

The Commission should require registrants to disclose their processes for identifying and assessing climate-related risks, as proposed. The Commission should clarify that disclosures about governance and risk-management processes must include how the company identifies, assesses, and manages risks from Scope 3 emissions.

The Commission should, as proposed, require registrants to disclose the following, as applicable, in describing their processes for identifying and assessing climate-related risks:

- How the registrant determines the relative significance of climate-related risks compared to other risks
- How the registrant considers existing or likely regulatory requirements or policies, such as emissions limits, when identifying climate-related risks
- How the registrant considers shifts in customer or counterparty preferences, technological changes, or changes in market prices in assessing potential transition risks
- How the registrant determines the materiality of climate-related risks, including how it assesses the potential size and scope of an identified climate-related risk

46. If a registrant has adopted a transition plan, should we require the registrant to describe the plan, including the relevant metrics and targets used to identify and manage physical and transition risks, as proposed? Would this proposed disclosure requirement raise any competitive harm concerns and, if so, how can we mitigate such concerns? Would any of the proposed disclosure requirements for a registrant’s transition plan act as a disincentive to the adoption of such a plan by the registrant?

The Commission should require a registrant to disclose its transition plan and describe the plan, including relevant metrics and targets used to identify and manage physical and transition risks, as proposed.

Access to information about transition plans and relevant metrics and targets is essential for investors and market participants to evaluate the seriousness of stated corporate intentions to identify and manage climate-related risks. Many companies have recognized that investors value preparedness for the transition and have begun making public claims to demonstrate their ostensible readiness. Goals and targets relating to emissions reduction are increasingly prominent in investor-facing materials such as annual reports.¹⁵⁵ More major global companies each year are committing to net-zero targets.¹⁵⁶ Yet, as discussed further in the responses to questions 93 and 98, many of these commitments are not supported with any publicly disclosed, detailed plans to achieve them, raising concerns about whether registrants are truly prepared for the transition. Investors need to see disclosures of detailed transition plans as proposed by the Commission to evaluate whether registrants have credible plans with dedicated resources. Without such information, investors are at risk of inadvertently allocating their capital under false pretenses to companies ill-prepared for the future economy.

Although the level of rigor varies, in 2021 more than 4,000 companies reported to the CDP that they had a low-carbon transition plan in place.¹⁵⁷ Private standard-setting bodies and industry initiatives will likely continue to define and develop guidance and best practices on validity, credibility, and rigor for transition plans, especially in measuring a company's performance toward its own goal as well as national and global goals. The Commission's role is not to require or evaluate such plans, but to require disclosure of any transition plans a registrant has adopted, all relevant metrics and milestones, and all reports on the registrant's performance (including expenditures on transition plan implementation).

Mandatory transition plan disclosure will not disincentivize adoption of transition plans. Investors and markets are already demanding those plans, so the only companies disincentivized by a disclosure requirement will be those with no intention of following through on stated commitments. Current experience shows that companies are already adopting and reporting their plans, which signals that companies see some advantage in doing so. The TCFD already requires disclosure of information about transition plans, with no concern about disincentivizing

¹⁵⁵ Bank of America. 2021. *Driving Responsible Growth—Now and Going Forward*. Charlotte, NC: Bank of America.
https://d1io3yog0oux5.cloudfront.net/1088ccf4f6f9f988f9561690f6739c81/bankofamerica/db/867/9640/annual_report/BAC_AR21_Full_Report_030122+%281%29.pdf

¹⁵⁶ Geck, Marshall. 2021. "Seven Major Companies that Committed to Net-Zero Emissions in 2021." *Principles for Responsible Investing* (blog). December 20, 2021.
<https://www.unpri.org/pri-blog/seven-major-companies-that-committed-to-net-zero-emissions-in-2021/9197.article>

¹⁵⁷ CDP Global. 2021. *Climate Transition Plan: Discussion Paper*. London: CDP Global.
https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/002/840/original/Climate-Transition-Plans.pdf?1636038499

adoption. An Oxford study cited by the TCFD found that more than 20 percent of the 2,000 largest public companies have net-zero commitments, with that subset of companies representing about \$14 trillion in annual sales.^{158, 159} For a company to have net-zero commitments and for those commitments to be realized, companies must prepare transition plans. Additionally,

From its consultation on metrics, targets, and transition plans, the Task Force found two-thirds of respondents had either developed a transition plan or planned to do so in the next year, with another 22% reporting they planned to develop a transition plan in the future.¹⁶⁰

Mandatory transition plan disclosure should not raise competitive harm concerns. The Commission is not requiring the disclosure of any proprietary or commercially sensitive information. Investors need to understand whether a registrant has put plans in motion to meet its stated goals and targets, which is a question of strategy. Registrants have to speak to their strategy regularly in their normal business reporting; this proposal simply adds clarity on disclosures regarding the strategy for transition plans.

The Commission should require disclosure of transition plans for the purposes of investor protection, given that companies can currently claim certain targets to reduce climate-related risks—such as net zero by 2050—in order to attract capital, without any real plan or intention to meet those targets. Investors need access to information about how companies plan to meet those targets to be sure that the companies they are entrusting with their capital are providing them the complete picture of risks and risk management plans.

47. If a registrant has adopted a transition plan, should we require it, when describing the plan, to disclose, as applicable, how the registrant plans to mitigate or adapt to any identified physical risks, including but not limited to those concerning energy, land, or water use and management, as proposed? Are there any other aspects or considerations related to the mitigation or adaptation to physical risks that we should specifically require to be disclosed in the description of a registrant’s transition plan?

The Commission should require a registrant that has adopted a transition plan, when describing the plan, to disclose, as applicable, how the registrant plans to mitigate or adapt to any identified

¹⁵⁸ Black, Richard, Kate Cullen, Byron Fay, Dr. Thomas Hale, John Lang, Saba Mahmood, and Dr. Steve Smith. 2021. *Taking Stock: A Global Assessment of Net Zero Targets*. London and Oxford, UK: Energy & Climate Intelligence Unit and Oxford Net Zero. https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf?mtime=20210323005817&focal=none, at 19.

¹⁵⁹ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Guidance on Metrics, Targets, and Transition Plans*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>, at 39.

¹⁶⁰ *Ibid.*

physical risks, including but not limited to those concerning energy, land, or water use and management, as proposed.

For the reasons discussed in the response to question 9, registrants should also be required to disclose, as applicable, how they plan to adapt to systemic threats to public health and safety, such as extreme heat, poor air quality, reduced food and water quality, changes in infectious disease vectors, and population displacement.

48. If a registrant has adopted a transition plan, should we require it to disclose, if applicable, how it plans to mitigate or adapt to any identified transition risks, including the following, as proposed:

- ***Laws, regulations, or policies that:***
 - ***Restrict GHG emissions or products with high GHG footprints, including emissions caps; or***
 - ***Require the protection of high conservation value land or natural assets?***
- ***Imposition of a carbon price?***
- ***Changing demands or preferences of consumers, investors, employees, and business counterparts?***

Are there any other transition risks that we should specifically identify for disclosure, if applicable, in the transition plan description? Are there any identified transition risks that we should exclude from the plan description?"

If a registrant has adopted a transition plan, the Commission should require the registrant to disclose how it plans to mitigate or adapt to any identified transition risks in that plan.

None of the Commission's identified transition risks, as defined in § 229.1500, should be excluded from the final rule.

For the reasons discussed in the response to question 9, the Commission should also require registrants to disclose how they plan to mitigate or adapt to laws, regulations, or policies that require the protection of biodiversity in addition to those that require the protection of high conservation value land or natural assets. Registrants should also be required to disclose risks and plans to mitigate risk related to laws, regulations, or policies that require enhanced pollution controls, protection of Indigenous or tribal people's land rights, worker or public safety and health, and mitigation of negative environmental justice and community-level consequences.

The Commission should specifically require registrants to disclose other transition risks, including the increase in adverse social conditions such as racial and economic inequality,

violations of land rights or human rights, or shifts in community perceptions of a registrant's contribution to or detraction from the transition to a lower-carbon economy. Further, registrants should be required to disclose processes to identify, address, and repair harms to communities impacted by climate-related risks or transition activities needed to avoid or mitigate political, legal, operational, and reputational risks.

Companies ill-prepared for the ongoing energy transition have an incentive to conceal some transition risks from investors, so the Commission should require a robust discussion on how registrants are dealing with, or choosing not to deal with, all of the transition risks named in the Proposal as well as those recommended for addition here.

49. If a registrant has adopted a transition plan, when describing the plan, should we permit the registrant also to discuss how it plans to achieve any identified climate-related opportunities, including, as proposed:

- ***The production of products that facilitate the transition to a lower carbon economy, such as low emission modes of transportation and supporting infrastructure?***
- ***The generation or use of renewable power?***
- ***The production or use of low waste, recycled, or environmentally friendly consumer products that require less carbon intensive production methods?***
- ***The setting of conservation goals and targets that would help reduce GHG emissions?***
- ***The provision of services related to any transition to a lower carbon economy?***

Should we require a registrant to discuss how it plans to achieve any of the above, or any other, climate-related opportunities when describing its transition plan?"

The Commission should require a registrant that has adopted a transition plan, when describing the plan, to discuss how it plans to achieve any identified climate-related opportunities, including, as proposed:

- The production of products that facilitate the transition to a lower carbon economy, such as low-emission modes of transportation and supporting infrastructure
- The generation or use of renewable power
- The production or use of low waste, recycled, or environmentally friendly consumer products that require less carbon-intensive production methods
- The setting of conservation goals and targets that would help reduce GHG emissions
- The provision of services related to any transition to a lower carbon economy

There is a high risk of deception around preparedness for the energy transition. For this reason, if a registrant reports climate-related opportunities in its transition plan, it should be required to

discuss how it plans to realize the opportunities presented. Climate-related opportunities for a registrant's transition plan can include those in a registrant's value chain, as discussed in response to question 93.

50. If a registrant has disclosed its transition plan in a Commission filing, should we require it to update its transition plan disclosure each fiscal year by describing the actions taken during the year to achieve the plan's targets or goals, as proposed? Should we require a registrant to provide such an update more frequently, and if so, how frequently? Would the proposed updating requirement act as a disincentive to the adoption of a transition plan by the registrant?

The Commission should require a registrant that has disclosed its transition plan in a Commission filing to update its transition plan disclosure each fiscal year by describing the actions taken during the year to achieve the plan's targets or goals, as proposed.

This would provide investors the opportunity to alter their investment decisions based on current information from registrants about their ability to adequately advance their strategy to meet planned goals and targets, and enhance the accuracy and reliability of annual financial reporting. The level of detail required from a registrant annually, as proposed, makes more-frequent updates, such as within 10-Q filings, unnecessary.

Given the impacts of climate change and the drive to decarbonize the global economy, many registrants have sought to decrease risks and decarbonize their own operations and have made public commitments to do so. Transition plan disclosures will help investors better understand how registrants plan to fulfill those commitments, as well as which registrants are best positioned to do so in line with their own stated commitments. Annual disclosures should include those, as proposed, in § 229.1503(c)(1) as well as in § 210.14-02(e)-(i) on annual disclosures of expenditures for transition activities and other climate impacts and risk-mitigation efforts.

Requiring annual updates should not disincentivize registrants that intend to follow through on their commitments from adopting a transition plan. If a registrant has adopted a meaningful transition plan, it should be making progress on that plan annually using the metrics disclosed in their filings. Disclosure of this information would not be burdensome. A requirement to update plans annually will mean that investors can judge whether public climate commitments are real or illusory, and if sufficient progress is being made to mitigate transition and physical risk to meet their risk tolerances.

51. To the extent that disclosure about a registrant’s transition plan constitutes forward-looking information, the PSLRA safe harbors would apply. Should we adopt a separate safe harbor for transition plan disclosure? If so, what disclosures should such a safe harbor cover and what should the conditions be for such a safe harbor?

The Commission should not adopt a separate safe harbor for transition plan disclosure because any forward-looking information from a registrant’s transition plan is subject to the PSLRA safe harbor and any historical or present information in a registrant’s transition plan should not be covered under safe harbor protections.

To the extent that disclosure about a registrant’s transition plan constitutes forward-looking information, registrants should clearly identify that information and accompany it with meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statement, as laid out in 15 U.S.C. § 78u-5.

See discussion in our response to question 32 for more information.

52. Should we require a registrant to provide contextual information, including a description of significant inputs and assumptions used, and if applicable, policy decisions made by the registrant to calculate the specified metrics, as proposed? Should we revise the proposed requirement to provide contextual information to require specific information instead? We provide some examples of contextual information disclosure in Sections II.F.2 and II.F.3 below. Would providing additional examples or guidance assist registrants in preparing this disclosure?

The Commission should require that registrants provide contextual information, including a description of significant inputs and assumptions used, and, if applicable, policy decisions made by the registrant to calculate specific metrics.

Investors need contextual information to understand the meaning and use of climate-impacted financial metrics and the basis on which they have been prepared. This information makes comparisons easier across registrants and helps inform the questions that investors and analysts can pose to management about climate risk. The TCFD recognizes this need and encourages issuers to provide a wide range of contextual information. This information is particularly important since the proposal does not dictate a set of standardized assumptions about how to incorporate climate risks into the financial statements. To understand the new financial statement metrics, investors will need contextual information about the estimates and assumptions that support them.

Certain contextual information is already required under existing accounting standards and Commission requirements. These requirements should be reiterated in the final rule, and the Commission should rigorously enforce them.

The Commission should not revise the Proposal to require specific information. Rather, it should provide detailed examples of the kinds of contextual information that is useful for understanding the specific metrics, which may vary by industry and line item and may evolve over time. Requiring specific information also risks implying that other contextual information does not need to be disclosed, excluding potentially important information for industries and events that are not directly referenced.

Examples of useful contextual information reflect suggestions from the TCFD,¹⁶¹ SASB,¹⁶² and the Proposal.¹⁶³

- The type of measurements used and whether they come from direct measurements, estimates, proxy indicators, or financial and management accounting processes
- Methodologies and definitions used, including the scope of application, data sources, critical parameters, assumptions, and any limitations of their methodology. This includes the estimation methodology used to disaggregate the amount of impact on the financial statements between the climate-related events and activities and other factors
- Trend data reflecting both absolute and relative changes over time, including how acquisitions, divestments, or policy shifts have affected those trends
- Information about how results are connected with business units, geographic areas, assets, types of activity, or other disaggregating information that helps better explain the metrics
- Effects of scenario analysis on the assumptions and estimates, the sensitivity of those assumptions and estimates to different scenarios, and the sensitivity of financial statement elements to those assumptions

53. The proposed rules would specify the basis of calculation for the climate-related financial statement metrics. Is it clear how to apply these accounting principles when calculating the proposed climate-related financial statement metrics, or should we provide additional guidance? Should we require a registrant to report these metrics with reference to its consolidated financial statements, as proposed? If not, how should registrants report these metrics? If we were to establish accounting principles (e.g., the basis for reporting these

¹⁶¹ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Guidance on Metrics, Targets, and Transition Plans*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>, at 39.

¹⁶² Sustainability Accounting Standards Board (SASB). 2017. *SASB Conceptual Framework*. San Francisco: SASB. https://www.sasb.org/wp-content/uploads/2019/05/SASB-Conceptual-Framework.pdf?source=post_page.

¹⁶³ Proposal at 21363, n. 314.

metrics) in a manner that differs from the principles applicable to the rest of the consolidated financial statements, would the application of those principles to the proposed metrics make climate-related disclosures less clear, helpful, or comparable for investors?

The Commission should require a registrant to report metrics with reference to its consolidated financial statements, as proposed.

Climate-related metrics should be included in the financial statements because they help investors understand the risk that climate-related impacts and responses to those impacts pose to the company's current and future financial position. Using a consistent basis of calculation is the best way to help investors make the connection between climate risk and overall financial performance. Alternative accounting principles would make the link murkier and less helpful.

Climate-related risk is already addressed under existing accounting requirements, as has been confirmed by the standards setters. For instance, IASB has issued guidance on how to incorporate climate-change risk into financial statements, and FASB staff has addressed these issues in a similar publication on the intersection of their accounting requirements and ESG matters, including climate.¹⁶⁴ Reporting metrics with reference to those standards will ease the transition for registrants, since their accountants and auditors are already familiar with them. These standards are also already understood by users of financial statements.

Using existing accounting standards to disclose climate risk is also consistent with the guidance provided by private entities offering voluntary disclosure frameworks, including SASB and GRI. These frameworks require climate-related financial data to be consistent with the corresponding financial data reported in the entity's financial statements.¹⁶⁵

54. Should we also require such metrics to be calculated at a reportable segment level when a registrant has more than one reportable segment (as defined by the FASB ASC Topic 280 Segment Reporting)? In addition, should we require such metrics to be presented by

¹⁶⁴ International Financial Reporting Standards Foundation (IFRS). 2020. "Effects of Climate-Related Matters on Financial Statements." IFRS, November, 2020. <https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf#:~:text=IFRS%20Standards%20do%20not%20refer%explicitly%20to%20climate-related,significant%20judgements%20and%20estimates%20that%20%20has%20made>; Financial Accounting Standards Board (FASB). 2021. "Intersection of Environmental, Social, and Governance Matters with Financial Accounting Standards." FASB, March 19, 2021. https://www.fasb.org/page/ShowPdf?path=FASB_Staff_ESG_Educational_Paper_FINAL.pdf&title=FASB%20Staff%20Educational%20Paper-Intersection%20of%20Environmental.

¹⁶⁵ Sustainability Accounting Standards Board (SASB). 2018. "SASB Standards Application Guidance." SASB. <https://www.sasb.org/wp-content/uploads/2018/11/SASB-Standards-Application-Guidance-2018-10.pdf>; Global Reporting Initiative (GRI). 2018. *GRI 201: Economic Performance 2016*. Amsterdam: GRI. <https://www.globalreporting.org/standards/media/1039/gri-201-economic-performance-2016.pdf>.

geographic areas that are consistent with the registrant’s reporting pursuant to FASB ASC Topic 280-10-50- 41? How would investors use such information?

The Commission should require metrics to be calculated at a reportable segment level and require presentation by geographic areas, consistent with existing accounting standards.

As discussed in the response to question 53, financial statement metrics are most valuable when a registrant applies the same accounting principles that it is required to apply in preparing the rest of its consolidated financial statements. If other financial metrics should be presented by segment or geographic area, then so should climate-related impacts.

Reflecting investors’ preference for this disclosure, the TCFD recommends disaggregating climate-related metrics by geographic area and business unit.¹⁶⁶ Investors can use such information to better compare companies on an apples-to-apples basis. For instance, a firm with multiple segments may be subject to more severe physical impacts than some of its peers in each segment based on the location of its assets and the composition of its business. If all of the impacts are aggregated across segments, investors may struggle to compare the registrant’s vulnerabilities, because there will not be firms that serve as an appropriate basis for comparison.

55. The proposed rules would require disclosure for the registrant’s most recently completed fiscal year and for the corresponding historical fiscal years included in the registrant’s consolidated financial statements in the filing. Should disclosure of the climate-related financial statement metrics be required for the fiscal years presented in the registrant’s financial statements, as proposed? Instead, should we require the financial statement metrics to be calculated only for the most recently completed fiscal year presented in the relevant filing? Would requiring historical disclosure provide important or material information to investors, such as information allowing them to analyze trends? Are there other approaches we should consider?

The Commission should require disclosure of all fiscal years presented in the registrant’s financial statements, as proposed.

As discussed in the response to question 53, climate-related financial statement metrics are most valuable to investors and other market participants when presented in the context of the full financial statement.

Reflecting investors’ preferences, the TCFD recommends providing this information for all

¹⁶⁶ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Guidance on Metrics, Targets, and Transition Plans*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>, at 13.

historical fiscal years included in a filing to help facilitate comparative and trend analysis.¹⁶⁷ While that data could be compiled by looking at previous annual reports, including it in the financial statements will help ease the review process and better highlight gaps or inconsistencies.

Presenting climate-related financial statement metrics from historical fiscal years is also valuable for illuminating any material changes to estimates and assumptions. The Proposal correctly requires that such changes be disclosed, and the historical trend data are critical to understanding the impact of those changes. Since the information will have been prepared anyway for the previous years, the costs of requiring inclusion of historical metrics are limited.

57. Should we provide additional guidance as to when a registrant may exclude a historical metric for a fiscal year preceding the current fiscal year?

For the reasons discussed in question 53, any additional guidance as to when a registrant may exclude a historical metric should be consistent with generally applicable rules for excluding a historical metric for a fiscal year.

58. In several instances, the proposed rules specifically point to existing GAAP and, in this release, we provide guidance with respect to the application of existing GAAP. Are there other existing GAAP requirements that we should reference? Are there instances where it would be preferable to require an approach based on TCFD guidance or some other framework, rather than requiring the application of existing GAAP?

The Commission should not require an approach based on a framework other than existing GAAP. The SEC should issue guidance indicating that many registrants are not complying with existing GAAP requirements related to disclosure of material climate risks.

As discussed in response to question 53 *et seq.*, the Commission is appropriately focused on requiring the proposed financial statement disclosures to be consistent with the consolidated financial statements, which are based on existing GAAP. The Commission should further clarify how “existing accounting standards could elicit climate-related disclosure in the financial statements.”¹⁶⁸

¹⁶⁷ *Ibid.*, at 12.

¹⁶⁸ Proposal at 21362.

The Commission should emphasize in its final rule that the FASB¹⁶⁹ and IASB¹⁷⁰ have already confirmed that their existing standards apply to climate risk, just as they do to other material risks. Under these existing requirements, where climate risks are material, they are integrated into drawing up company accounts—for example in relation to longer-term considerations of cash flows and potential impairment of fixed and intangible assets, estimated lives used to determine depreciation or amortization of long-lived assets, the amount and timing of asset retirement obligations, and recoverability of deferred tax assets. The final rule should also emphasize that financial statement assumptions that are quantitatively or qualitatively material should be disclosed under existing GAAP, and those assumptions should be consistent with statements made elsewhere in a registrant’s annual filings.

Existing rules already provide significant clarity on registrants’ reporting obligations, and evidence is mounting that these obligations are not consistently upheld. Carbon Tracker’s study of disclosure trends in emissions-intensive industries shows that, even where climate risk is clearly material, existing financial statement requirements are not being properly followed by companies, and auditors have not addressed this oversight.¹⁷¹

Given the importance of these disclosures, the Commission may also wish to issue a Risk Alert, SAB, or other authoritative guidance in tandem with the final rule, clarifying the requirements in existing GAAP to account for and disclose material climate-related risks and assumptions. Noncompliance with existing accounting rules relating to climate risk warrants focused attention from the Commission’s Enforcement division.

59. Should we require registrants to disclose the financial impact metrics, as proposed? Would presenting climate-specific financial information on a separate basis based on climate-related events (severe weather events and other natural conditions and identified physical risks) and transition activities (including identified transition risks) elicit decision-useful or material information for investors? Are there different metrics that would result in disclosure of more useful information about the impact of climate-related risks and climate-related opportunities on the registrant’s financial performance and position?

¹⁶⁹ Financial Accounting Standards Board (FASB). 2021. “Intersection of Environmental, Social, and Governance Matters with Financial Accounting Standards.” FASB, March 19, 2021. https://www.fasb.org/page/ShowPdf?path=FASB_Staff_ESG_Educational_Paper_FINAL.pdf&title=FASB%20Staff%20Educational%20Paper-Intersection%20of%20Environmental.

¹⁷⁰ International Financial Reporting Standards Foundation (IFRS). 2020. “Effects of Climate-Related Matters on Financial Statements.” IFRS, November, 2020. <https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf#:~:text=IFRS%20Standards%20do%20not%20refer%explicitly%20to%20climate-related,sig nificant%20judgements%20and%20estimates%20that%20%20has%20made>.

¹⁷¹ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 1.

The Commission should require disclosure of financial impact metrics in aggregate on a line item basis and on a separate basis based on climate-related events and transition activities, especially because of the ongoing failure by registrants to meet their existing obligations to disclose climate-related information in their financial statements.

Climate-related events and transition activities can potentially impact both individual line items and an assessment of the registrant’s overall financial condition. As discussed in the response to question 58, accounting standard setters have begun providing guidance to this effect. The Commission has also recognized since at least 2010 that both the physical impacts of climate change and the legal, political, technological, and scientific impacts of the energy transition may have material impacts on a registrant’s financial condition.¹⁷² Recognizing this need, investors and other market participants have expressed a need for quantitative information about how critical estimates and assumptions will shift based on climate change, and the material impacts the changes can have on the financial statements.¹⁷³ Yet Carbon Tracker has found that only 13 percent of companies using US GAAP appropriately disclosed at least some of those assumptions and estimates, in contrast to 31 percent of companies who prepared their statements using IFRS Standards.¹⁷⁴

Critics have expressed skepticism about the Commission’s adoption of this rule by noting that it lacks climate expertise.¹⁷⁵ The Commission’s approach reflects a focus on its own expertise and authority. Rather than predicting the progression of either climate change or the energy transition, the Commission has tied disclosure to its expertise in financial impacts and accounting estimates and assumptions. The Commission’s approach appropriately covers all sectors and uses specified financial thresholds to trigger reporting requirements. These broad-based requirements based on financial impact will help investors stay ahead of developing threats and prudently manage their investments for the long term.

The Commission’s choice to use a line item approach reflects its authority to dictate the form and

¹⁷² Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC, February 8, 2010. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>, 25–26.

¹⁷³ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 3; Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres. <https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>, at 4.

¹⁷⁴ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 21.

¹⁷⁵ Peirce, Hester M. 2022. “We Are Not the Securities and Environment Commission—At Least Not Yet.” Statement, March 21, 2022. <https://www.sec.gov/news/statement/peirce-climate-disclosure-20220321>.

content of financial statement disclosures.¹⁷⁶ Identifying where the climate-related impacts affect the financial statements allows investors to understand how climate impacts on assumptions and estimates actually flow through to a registrant's financial condition. Investors can use that information, in conjunction with the changes to assumptions and estimates, to understand the risks that climate change poses and to compare the way that different assumptions and estimates affect different registrants.

The Commission does not need to establish the materiality of every line item disclosure. In areas where a topic is broadly material, it is appropriate for the Commission to prescribe standardized tabular disclosure, even if some individual items are not material.¹⁷⁷ That approach is the basis of Regulation S-X, which is composed of requirements to disclose specific financial information in a specific format, without establishing the materiality of every item for all registrants.

As Commissioner Lee has said, prescriptive requirements are particularly appropriate because registrants are failing to disclose material climate-related information.¹⁷⁸ The Proposal also correctly notes that standardization will provide greater clarity for registrants about compliance with existing securities laws.¹⁷⁹ It will also make the disclosures more comparable and decision-useful for investors, and limit the ability of management to manipulate data or obscure climate-related threats to their business during a period where standard metrics are still evolving.

Finally, the Commission should clarify the link between the proposed quantitative disclosures in the financial statements and the proposed additions in subpart 229.1500. Qualitative disclosures are intended to provide an “explanation of a registrant's financial statements that enables investors to see the registrant through the eyes of management.”¹⁸⁰ Requiring the financial statements to reflect the risks identified by management will help keep those qualitative disclosures from turning into a boilerplate discussion with no relation to the business. In the final rule, the Commission should make it clear that it intends the qualitative and quantitative disclosures to have a logical resonance that investors can use to thoroughly assess the financial condition of a registrant.

60. Would the impact from climate-related events and transition activities yield decision-useful information for investors? Would the climate-related events (including the examples provided) and transition activities result in impacts that are easier to quantify or disaggregate than

¹⁷⁶ 17 C.F.R. Part 210.

¹⁷⁷ Lee, Allison Herren. “Living in a Material World: Myths and Misconceptions about ‘Materiality.’” Keynote Remarks, 2021 EST Disclosure Priorities Event, Washington, DC, May 24, 2021. US Securities and Exchange Commission. <https://www.sec.gov/news/speech/lee-living-material-world-052421>.

¹⁷⁸ *Ibid.*

¹⁷⁹ Proposal at 21362

¹⁸⁰ Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC, February 8, 2010. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>, at 15.

climate-related risks more generally? Would a registrant be able to quantify and provide the proposed disclosure when the impact may be the result of a mixture of factors (e.g., a factory shutdown due to an employee strike that occurs simultaneously with a severe weather event)? If there are situations where disaggregation would not be practicable, should we require a registrant to disclose that it was unable to make the required determination and why, or to make a reasonable estimate and provide disclosure about the assumptions and information that resulted in the estimate?

The Commission should require disclosure of climate-related events and transition activities on a separate basis, as proposed.

Physical risks and transition risks pose separate risks and it is appropriate to report related financial impacts on a separate basis. Although together, these two forms of risk cover what is understood as climate-related risk, they have different sources and drivers. Requiring disclosure on a separate basis will help investors understand how a company is affected by and considers each type of risk, providing more decision-useful information.

Conversely, combining their impacts into a single climate-related risk metric would make it harder for investors and other market participants to understand the specific risks that a registrant faces. For instance, for some registrants, along certain time horizons, vulnerability to physical risk and transition risk may pose a tradeoff. Registrants in this position that are slow to shift their business to account for climate risks may face higher costs from severe-weather events and other natural conditions than peers who transition more quickly, while enjoying lower costs (at least in the short term) from transition-related activities. The netting out of costs from these two types of impacts in this case could potentially obscure, rather than illuminate, the level of climate-change preparedness across registrants.

Reporting transition activities on a separate basis also better serves investor needs because investors will have a range of views about the appropriate level of expenditure for transition activities, based on their estimates of the progression of the climate crisis and the trajectory of the zero-carbon transition. As registrants adjust to investor demands, robust and comparable disclosure of the financial impacts of transition activities will make it easier for investors of all persuasions to allocate capital to companies they believe are appropriately addressing their climate risks.

Some registrants or investors may contend that financial statements are backward-looking, and that reporting on the impacts of physical risks does not match investors' needs for forward-looking financial metrics. Such an objection misunderstands the nature of both financial reporting and climate change. Many entries in the financial statements reflect a forward-looking assessment of a registrant's condition. And the latest reporting by the IPCC confirms that climate

change has already cost the global economy billions of dollars and disrupted millions of lives globally.¹⁸¹ A critical element of assessing climate risk readiness in the future is understanding how affected a firm is by the impacts of climate change today. For example, firms that are already suffering severe weather related impacts to their coastal and floodplain assets are likely to suffer even more serious impacts in the future if those assets are not relocated, as climate change worsens property damage in flood-prone locations.

For a subset of registrants and investors, disclosing the financial impacts of climate-related events today could also help provide critical contextual information for transition-related impacts. Some registrants that are particularly exposed to physical risks may conclude that they have a financial imperative to accelerate the global energy transition in a way that will reduce their long-term exposure to physical impacts. Disclosure will help investors understand which firms are making those choices, and assess the business case appropriately. Similarly, investors with structural exposure to severe physical risks (e.g. municipal pension funds in areas at risk from rising sea levels) may similarly emphasize the financial benefits of a rapid energy transition. By requiring comparable disclosure across registrants, and requiring reporting by segment and geography where appropriate, the Commission will make it easier for investors to assess which registrants are pursuing such a strategy, and to pursue such a strategy themselves.

61. Alternatively, should we not require disclosure of the impacts of identified climate-related risks and only require disclosure of impacts from severe weather events and other natural conditions? Should we require a registrant to disclose the impact on its consolidated financial statements of only certain examples of severe weather events and other natural conditions? If so, should we specify which severe weather events and other natural conditions the registrant must include? Would requiring disclosure of the impact of a smaller subset of climate-related risks be easier for a registrant to quantify without sacrificing information that would be material to investors?

The Commission should require disclosure of the impacts of all identified climate-related risks and the impacts from severe weather events and other natural conditions, as proposed.

The climate-related risks identified pursuant to proposed § 229.1502(a) are the ones that, in management's judgment, are reasonably likely to have a material impact on the registrant's business or financial statements in the short-, medium-, or long-term. Because the effects of climate change will manifest differently based on a registrant's geography and lines of business over time, limiting disclosure may exclude impacts that only affect specific registrants. The risks that the registrant identifies should also inform any material changes to estimates and

¹⁸¹ Plumer, Brad, and Raymond Zhong. 2022. "Climate Change Is Harming the Planet Faster Than We Can Adapt, U.N. Warns." *New York Times*, February 28, 2022, sec. Climate. <https://www.nytimes.com/2022/02/28/climate/climate-change-ipcc-report.html>.

assumptions, and those changes should be reflected throughout the financial statements. Moreover, it is useful for investors to know when the impacts push the financial statement impacts of a line item above the quantitative threshold that the Commission adopts. This information will help them understand whether and when risks that management has identified are actually manifesting across different registrants.

Disclosing only certain examples of severe weather events or other natural conditions would also provide less decision-useful information to investors. Climate change will affect registrants' financial condition and performance in many ways, based on their location and lines of business. The Commission should not seek to forecast which particular weather events or natural conditions will be most impactful, as that is beyond its expertise.

63. Is it clear which climate-related events would be covered by “severe weather events and other natural conditions”? If not, should we provide additional guidance or examples about what events would be covered? Should we clarify that what is considered “severe weather” in one region may differ from another region? For example, high levels of rainfall may be considered “severe weather” in a typically arid region.

The Commission’s approach to defining severe weather events and other natural conditions is clear.

In general, the Commission has provided appropriate examples of the types of events that are covered by “severe weather events and other natural conditions.” They are the main projected physical impacts of climate change. Registrants should understand, based on the rule and explanations in the proposal, that if the financial statement impacts of severe weather events or other natural conditions meet the threshold adopted in the final rule, they must disclose the aggregate amount of those impacts.

It would not be appropriate to alter the definition of severe weather based on regional differences. The numerous variables would make regional definitions too difficult to formulate. For example, the specific level of rainfall that may be considered severe weather in a region depends not only on the level of rainfall, but also how unexpected the rainfall is, the rate of rainfall, the investment in infrastructure and protocols made to manage that level of rainfall, and the degree of manmade changes to the landscape that increase the risk of dangers from excessive rain, such as mudslides, among other issues.

64. Are the proposed requirements for calculating and presenting the financial impact metrics clear? Should the analysis be performed and disclosed in a manner other than on a

line-by-line basis referring to the line items of the registrant's consolidated financial statements?

The proposed requirements are clear and the Commission should require registrants to perform and disclose the analysis on a line-by-line basis, as proposed.

The proposed requirements for calculating and presenting the financial impact metrics are clear. Using estimates and assumptions that are updated to reflect the impacts of the effects of climate change and the energy transition, a registrant can assess the financial impacts of climate change on its business, as required. It must then allocate these impacts to specific financial statement line items. Once the climate-related impacts have been allocated, then, with respect to each line item, the registrant must aggregate the absolute value of the negative and positive impacts of all severe weather events and other natural conditions on that line item, as well as any other physical climate-related risks identified by the registrant pursuant to § 229.1502(a). Separately, it must aggregate the absolute value of the negative and positive impacts of all transition activities on that line item. If the aggregated impact of the severe weather events and other natural conditions and transition activities added together exceeds a quantitative threshold, then the aggregate impact of both severe weather events and other natural conditions and transition activities must be disclosed as a note to the relevant line item. The Commission has used a similar quantitative threshold approach elsewhere by requiring disclosure where the aggregated notional amount of all open options contracts exceeds a one percent net asset value threshold.¹⁸²

The Commission should clarify in the text of § 210.14-02(i) that a registrant must include the impacts on a relevant line item of climate-related risks identified by the registrant pursuant to § 229.1502(a) in calculating paragraphs (c) through (h). Currently, the text could be read to say that the registrant must only include those risks if they would affect one of the financial statement impacts already identified based on the other risks discussed in (c) through (h).

66. The proposed financial impact metrics would not require disclosure if the absolute value of the total impact is less than one percent of the total line item for the relevant fiscal year. Is the proposed threshold appropriate? Should we use a different percentage threshold (e.g., three percent, five percent) or use a dollar threshold (e.g., less than or greater than \$1 million)? Should we use a combination of a percentage threshold and a dollar threshold? Should we only require disclosure when the financial impact exceeds the threshold, as proposed, or should we also require a determination of whether an impact that falls below the proposed quantitative threshold would be material and should be disclosed?

The Commission should use a quantitative threshold. The Commission should also require firms

¹⁸² Proposal at n. 347

to determine whether an impact that falls below the proposed threshold would nevertheless be material given its nature, and thus disclosed.

As the Proposal recognizes, a quantitative threshold will help generate consistent, comparable disclosure, both over time and across registrants.¹⁸³ The need for a quantitative threshold is also apparent from the lack of climate-related financial statement disclosure under current accounting standards. Despite guidance from accounting standard setters, even firms in some of the most climate- or transition-vulnerable industries, like oil and gas, do not disclose climate-related information in their financial statements.¹⁸⁴ This gap, along with statements from some critics that climate risk disclosure would significantly change the behavior of investors, suggests that registrants are not conducting a materiality analysis that reflects the views of reasonable investors. Adopting a materiality-based standard here would continue this unacceptable state of affairs.

The failure of the less prescriptive materiality-based approach used in the 2010 Climate Guidance should steer the Commission away from adopting this path. It has created inconsistency in the depth and specificity of disclosures by registrants, driven in part by differences in how registrants assess the materiality of climate-related impacts.¹⁸⁵ Standardized disclosure based on a quantitative threshold will eliminate confusion about whether an issuer has no climate-related impacts, or whether it simply does not judge them as material. It will also benefit registrants by specifying the disclosures they need to provide, reducing the frequency of one-off or redundant investor demands for information.

Although quantitative thresholds for requiring disclosure are not standard, the Commission has employed them in the past, and has the unquestioned authority to adopt them.¹⁸⁶ Such guidance does not entirely substitute for managerial judgment as it typically specifies only minima, leaving room for registrants to assess the materiality of disclosure below the threshold. This is the case with the thresholds as currently proposed.

To that end, although a fixed quantitative threshold is critical, it should serve as a floor on disclosure, and not a ceiling. Accounting standards state that an assessment of materiality must be made on the basis of size (quantitative) and nature (qualitative factors) or a combination of

¹⁸³ Proposal at 21366.

¹⁸⁴ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 6.

¹⁸⁵ Proposal at 21340.

¹⁸⁶ Proposal at 21366. See also, Securities and Exchange Commission (SEC). 1999. "SEC Staff Accounting Bulletin: No. 9 - Materiality." SEC, August 12, 1999. <https://www.sec.gov/interps/account/sab99.htm#body8>.

both.¹⁸⁷ Where investors and other market participants closely scrutinize information about an event or condition, an item of information could influence their decisions regardless of its size, even if it is zero. In certain industries, the effects of climate-related impacts and transition activities on certain line items may be material and need to be disclosed, regardless of size.

For instance, major investors in the oil and gas industry are highly attuned to the impacts of climate change and the energy transition on the impairment of long-lived assets or asset groups.¹⁸⁸ For registrants operating in this industry, a judgment of zero impairment of assets based on transition activities, disclosed on the appropriate line item, is likely a material piece of information that requires separate disclosure and analysis.

To further reinforce the importance of any fixed quantitative threshold serving as a floor on disclosure, the Commission should issue an SAB or other authoritative guidance to clarify the need under existing rules to account for and provide disclosure on how material climate-related risks have been considered, regardless of a specific threshold. This will help provide a strong underpinning for the proposed disclosures.

67. For purposes of determining whether the disclosure threshold has been met, should impacts on a line item from climate-related events and transition activities be permitted to offset (netting of positive and negative impacts), instead of aggregating on an absolute value basis as proposed? Should we prescribe how to analyze positive and negative impacts on a line item resulting from the same climate-related event or the same transition activity (e.g., whether or not netting is permitted at an event or activity level)? Should we permit registrants to determine whether or not to offset as a policy decision (netting of the positive and negative impact within an event or activity) and provide relevant contextual information? Should we require the disclosure threshold to be calculated separately for the climate-related events and transition activities, rather than requiring all of the impacts to be aggregated as proposed?

The Commission should not permit netting of climate impacts at the line item level or at an activity or event level.

¹⁸⁷ International Financial Reporting Standards Foundation (IFRS). 2022. “IAS 1 Presentation of Financial Statements.” IFRS Standards Navigator. Accessed June 8, 2022.

<https://www.ifrs.org/issued-standards/list-of-standards/ias-1-presentation-of-financial-statements/#about>;

International Financial Reporting Standards Foundation (IFRS). 2019. “Nick Anderson—IFRS Standards and Climate-Related Disclosures.” IFRS, November 28, 2019.

<https://www.ifrs.org/news-and-events/news/2019/11/nick-anderson-ifrs-standards-and-climate-related-disclosures/>, at 7.

¹⁸⁸ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres.

<https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>.

The effects of climate change are complex and quickly evolving. It is not appropriate to assume that just because the positive and negative impacts net out for a registrant today, either for a line item or at an event or activity level, they will continue to do so in the future. Although they are correlated, many of these events and activities are separate, and it would not be appropriate to net them just because they, coincidentally, are driven in different directions in a fiscal year.

The absolute value standard also provides a useful approach for helping investors assess the volatility from the climate-related impacts and transition activities that a registrant is exposed to. A certain level of absolute impacts, regardless of direction, is an indication of significant exposure to climate change. Registrants that have large offsetting positive and negative financial statement impacts from climate change and transition activities have a very different climate risk profile from registrants with negligible financial statement impacts in either direction. Treating both registrants similarly for purposes of requiring disclosure would obscure decision-useful information and prevent investors and markets from investing capital with full information.

A netting approach would also be subject to a greater risk of manipulation. A registrant will have some discretion in how it allocates the financial impact of events or activities with multiple causes. Under a netting approach, a registrant could err on the side of minimizing the climate share of negative impacts, and maximizing the climate share of positive impacts, and fall below the quantitative threshold. This is particularly problematic if, as proposed, a registrant may consider the impact of climate-related opportunities, which could be used to reduce the apparent magnitude of significant negative climate-related impacts.

By using an absolute value standard, the Proposal allows investors to determine, based on full information and their own risk appetite, how they want to invest. Permitting offsetting would reduce the decision-useful information they have to make sound decisions.

For the same reason, if the Commission chooses to require the disclosure threshold to be calculated separately for climate-related impacts and transition activities, it should take an inclusive approach. That is, if either one meets the threshold, then the registrant should disclose the financial impact metrics for both on a separate basis. That will give investors the most complete information about the climate-related risk a registrant faces.

68. Instead of including a quantitative threshold, as proposed, should we require disaggregated disclosure of any impact of climate-related risks on a particular line item of the registrant's consolidated financial statements? Alternatively, should we just use a materiality standard?

For the reasons discussed in response to question 66, the Commission should not use a

materiality standard.

71. Are the proposed examples in the financial impact metrics helpful for understanding the types of disclosure that would be required? Should we provide different or additional examples or guidance?

The Commission should add additional examples that address specific real-world situations that the Commission believes are likely to manifest based on questions and requests for clarification raised in the comments or in public reaction to the disclosures.

The proposed examples in the financial impact metrics are helpful for understanding the mechanics of calculating the disclosure, but they are not tied to specific situations a registrant may face. Given the importance of disclosures being consistent and comparable in order to be decision-useful, it would be helpful for the Commission to provide more detailed guidance on specific situations, either in the final rule or as supplemental guidance.

In particular, the Commission should consider some common climate-related impacts and transition activities that registrants will encounter and describe how it expects them to quantify the potential impacts and disclose contextual information. Examples could include:

- How to report on a specified climate-exacerbated severe weather event, like a hurricane or wildfire, both in the year that the event happened and for future years where the impacts may continue to manifest on the financial statement
- How to disaggregate the effects of a severe weather event or natural condition and another related event, like a strike, disease outbreak, or infrastructure failure, as discussed in the proposal
- How to incorporate economic, legal, social, and technological changes into the valuation of long-lived assets as well as provisions for impairment of those assets
- How to report on activities that incidentally reduce GHG emissions, such as upgrading equipment to a lower emissions or more energy-efficient model due to regular lifecycle purchasing decisions

72. Should we require registrants to disclose the expenditure metrics, as proposed? Would presenting the expenditure metrics separately in one location provide decision-useful information to investors? Is there a different type of metric that would result in more useful disclosure of the expense or capitalized costs incurred toward climate-related events and transition activities or toward climate-related risks more generally?

The Commission should require registrants to disclose expenditure metrics separately in one location, as proposed.

The expenditure metrics related to mitigating transition and physical risks are important for investors. With respect to physical risk, the IPCC has estimated that billions of dollars have already been spent on adapting to the effects of climate change, and that those costs will only increase as climate change worsens.¹⁸⁹ The financial impacts that a registrant faces from the physical impacts of climate change are the sum of the impacts of severe weather events and other natural conditions (captured in the financial statement metrics required by 210.14-02(c)) and the impacts of preparing for future events, captured in this section.

The combination of the financial statement metrics and the expenditure metrics for the impact of severe weather events and natural conditions is decision-useful information. Some registrants may choose to invest more in risk mitigation based on the location of their assets and business, while others may conclude that they are less exposed to severe weather or that the costs of risk mitigation are prohibitive. Thus, expenditures on risk mitigation provide important insight into how management plans to address the risks from climate change in the short and medium term. It will serve as an important check for investors on management statements about exposure to climate risk made in the proposed disclosed under Regulation S-K.

The transition activities expenditure metric is also important. Presenting this information in the financial statements can help users understand the scale of investments in different transition activities relative to the overall financial condition of the company. In particular, capital expenditures help inform assessments of the risk of impairment for a registrant's long-lived assets and the proportion of debt and equity to be funded on an organization's balance sheet.¹⁹⁰ TCFD users and RFI commenters have both consistently identified this metric as among the most relevant for evaluating how a registrant is addressing transition risk.¹⁹¹ By putting this information in one place, the Proposal will put this information in the context of a company's total expenses, instead of individual line items, and make it easier for investors to identify and use it.

This information is also important for assessing the transition plans disclosed by registrants. As discussed in the responses to questions 46-50, investors need decision-useful information to assess whether a registrant is actually complying with the targets it has laid out, or has made a

¹⁸⁹ Plumer, Brad, and Raymond Zhong. 2022. "Climate Change Is Harming the Planet Faster Than We Can Adapt, U.N. Warns." *New York Times*, February 28, 2022, sec. Climate. <https://www.nytimes.com/2022/02/28/climate/climate-change-ipcc-report.html>.

¹⁹⁰ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>, at 9.

¹⁹¹ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Guidance on Metrics, Targets, and Transition Plans*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-2.pdf>, at 4; Proposal at 21367.

deceptive pledge. The expenditure metrics provide a quantitative indication of the alignment between a registrant's stated goals and its actual investment in achieving those goals.

73. Would the disclosure required by the expenditure metrics overlap with the disclosure required by the financial impact metrics? If so, should we require the disclosure to be provided pursuant to only one of these types of metrics?

The Commission should require disclosure of both expenditure metrics and financial impact metrics, as proposed.

As discussed in the response to question 72, the expenditure metrics for mitigating severe weather events and other natural conditions are complementary to the corresponding financial impact metrics. The financial impacts metrics cover the effects of specific events, while the expenditure metrics cover the impacts of preparedness for future events. The Commission should explain this difference when it finalizes the Proposal.

The expenditure metrics for transition activities may overlap with some line items captured in the corresponding financial impact metric for some registrants. But as noted in the Proposal, expenditure information is often dispersed among the financial statements in a way that may be difficult for investors to compile and reconcile.¹⁹² In addition, companies present line items on their financial statements differently for reasons unrelated to climate. This can make comparing the transition activities of different companies difficult on a line item basis. The expenditure metrics can serve as an overview and summary of expenditure on transition activities, making it easier to compare across registrants. But the individual line item analysis still would provide additional decision-useful information, especially for firms with high levels of transition expenditures. Expenditure-only metrics miss the financial impacts on revenue and cost of revenue from the transition, a particular risk for industries with products used in high-emissions processes. Conversely, the expenditure metrics focus on expenditures to mitigate the risk from the transition, which is fully under the registrant's control. The two metrics provide differing perspectives: one more focused on exposure, and the other on mitigation and preparedness. This distinction is critical and the information needed to understand it should not be denied to investors and other market participants.

74. Should the same climate-related events (including severe weather events and other natural conditions and identified physical risks) and transition activities (including identified transition risks) that we are proposing to use for the financial impact metrics apply to the expenditure metrics, as proposed? Alternatively, should we not require a registrant to disclose

¹⁹² Proposal at 21371.

expenditure incurred towards identified climate-related risks and only require disclosure of expenditure relating to severe weather events and other natural conditions? Should we require a registrant to disclose the expenditure incurred toward only certain examples of severe weather events and other natural conditions? If so, should we specify which severe weather events and other natural conditions the registrant must include? Would requiring disclosure of the expenditure relating to a smaller subset of climate-related risks be easier for a registrant to quantify without sacrificing information that would be material to investors?

The Commission should use the same climate-related events and transition activities as proposed for the expenditure metrics, including all climate-related events and transition activities.

As discussed in the response to question 73, the information presented in the expenditure metrics is complementary to the information presented in the financial impact metrics. Maintaining a consistent set of events and activities for both metrics will help keep the information provided comparable and decision-useful.

For the reasons discussed in the response to question 61, the Commission should require disclosure of expenditure metrics based on identified climate-related risks, and not just severe weather events and other natural conditions. Investors need to know the level of expenditures that management is making toward addressing and mitigating those risks. Including these risks will help increase the logical resonance between the information added in the financial statements and the newly required disclosures outside the financial statements. It will also help prevent the disclosures outside the financial statements from becoming boilerplate language by allowing investors to assess whether management is “putting its money where its mouth is” in addressing the risks it has enumerated.

75. Should the proposed rules instead require a registrant to disclose the aggregate amounts of expensed and capitalized costs incurred toward any climate-related risks? Should expenditures incurred towards climate-related opportunities be optional based on a registrant’s election to disclose such opportunities, as proposed?

The Commission should require the disclosure of expensed and capitalized costs for severe weather events and other natural conditions and for transition activities on a separate basis.

Capitalized and expensed costs should be disclosed on a separate basis. The two costs have different effects on the value of assets and are reported separately elsewhere in the financial statements. Thus, reporting them on a separate basis here is consistent with the accounting principles applied elsewhere in the financial statements. In addition, in some cases, the timing of capitalized vs. expensed costs may reflect the timing of activities aimed at addressing physical or

transition risks. Disclosing them on a separate basis may draw out additional explanations from registrants, and help investors and other market participants to understand how different registrants are choosing to address risks.

76. Should we apply the same disclosure threshold to the expenditure metrics and the financial impact metrics? Is the proposed threshold for expenditure metrics appropriate? Should we use a different percentage threshold (e.g., three percent, five percent) or use a dollar threshold (e.g., less than or greater than \$1 million)? Should we use a combination of a percentage threshold and a dollar threshold? Should we only require disclosure when the amount of climate-related expenditure exceeds the threshold, as proposed, or should we also require a determination of whether an amount of expenditure that falls below the proposed quantitative threshold would be material and should be disclosed? Should we require separate aggregation of the amount of expense and capitalized costs for purposes of the threshold, as proposed? Should we require separate aggregation of expenditure relating to the climate-related events and transition activities, as proposed?

The Commission should use a quantitative threshold, as proposed, and should also require a determination of whether an expenditure that falls below the threshold would nevertheless be material and thus disclosed.

For the reasons discussed in the response to question 66, the Commission has appropriately adopted a quantitative threshold for requiring disclosure of expenditure metrics. As described in that response, when the Commission adopts a threshold, it has historically required a materiality assessment for amounts that fall under that threshold and should do so in this instance.

77. Instead of including a quantitative threshold, as proposed, should we require disaggregated disclosure of any amount of expense and capitalized costs incurred toward the climate-related events and transition activities, during the periods presented? Alternatively, should we just use a materiality standard?

For the reasons discussed in the response to question 66, the Commission should not adopt a materiality standard for expenditure metrics.

78. Are the proposed requirements for calculating and presenting the expenditure metrics clear? Should the analysis be performed and disclosed in a different manner, other than separately based on capitalized costs and amount of expenditure expensed and separately based on the climate-related events and transition activities? Should disclosure of expenditure

incurred be required for both the amount of capitalized costs and the amount of expenditure expensed if only one of the two types of expenditure meets the disclosure threshold? Should we require separate disclosure of expenditure incurred toward each climate-related event and transition activity?

The proposed requirements are clear and the analysis should be performed in the manner proposed.

The proposal requires disclosure of the total amount of expenditure expensed in a fiscal year for mitigating risks from severe weather events and other natural conditions and for transition activities if the total exceeds one percent of total operating expenditure for a fiscal year. This information must be reported for all fiscal years presented on the financial statement. If the information is disclosed, it must be presented on a separate basis for severe weather events and other natural conditions, and for climate-related transition activities.

Separately, the proposal requires disclosure of the total amount of capital costs incurred in a fiscal year for mitigating risks from severe weather events and other natural conditions and for transition activities if the total exceeds one percent of total capital expenditure for a fiscal year. This information must be reported for all fiscal years presented on the financial statement. If the information is disclosed, it must be presented on a separate basis for severe weather events and other natural conditions, and for climate-related transition activities.

All of this information must be accompanied by appropriate contextual information, including explanations of what the major expenditures represent, as per paragraph 210.14-02(a).

79. The proposed rule does not specifically address expensed or capitalized costs that are partially incurred towards the climate-related events and transition activities (e.g., the expenditure relates to research and development expenses that are meant to address both the risks associated with the climate-related events and other risks). Should we prescribe a particular approach to disclosure in such situations? Should we require a registrant to provide a reasonable estimate of the amount of expense or capitalized costs incurred toward the climate-related events and transition activities and to provide disclosure about the assumptions and information that resulted in the estimate?

The Commission need not prescribe a particular approach to disclosure in allocating costs partially incurred toward climate-related events. Allocating costs across multiple risks is already a practice that registrants must engage in.

Registrants should already have some experience with allocating capitalized costs that are

partially incurred toward multiple risks. For instance, since the 1970s, the Commission has required registrants to disclose the total costs of complying with environmental laws, including anticipated capital expenditures.¹⁹³ In some cases, that may mean accelerating upgrades of equipment that has other benefits, such as greater productivity or efficiency. Presumably, registrants have allocated those expenditures between environmental compliance and other business purposes and could adapt such methodologies to the disclosures required in the Proposal.

80. Are the proposed terms and examples used in the expenditure metrics helpful for understanding the types of disclosures that would be required? Should we provide different or additional examples?

For the reasons discussed in question 71, the Commission should add additional examples that address specific real-world situations that it believes are likely to manifest based on questions and requests for clarification raised in the comments or in public reaction to the disclosures.

In particular, the Commission should provide examples of acceptable ways of reporting expenses that are only partially incurred due to climate-related events and transition activities. The Commission does not need to require a specific method in these examples, but it should provide some illustrative cases that registrants can refer to in conducting their own analysis.

81. Should we require disclosure of financial estimates and assumptions impacted by the climate-related events and transition activities (including disclosed targets), as proposed? How would investors use this information?

The Commission should clarify that registrants have an existing obligation to disclose climate-related financial estimates and assumptions and that the Proposal is providing guidance on the form and location of this already-required disclosure.

As discussed in the response to question 58, existing guidance from accounting standard setters already requires registrants to incorporate climate-related matters into their financial statements, as well as to disclose key accounting estimates and assumptions. Climate-related matters tied to both the anticipated effects of worsening climate change and the energy transition affect those assumptions and estimates.¹⁹⁴

¹⁹³ Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC, February 8, 2010. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>, at 13.

¹⁹⁴ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 2.

Investors have expressed their need for this information to better understand how a registrant is affected by climate-related impacts. These estimates and assumptions provide perhaps the single clearest view into those effects and management’s assessment of future impacts. Reflecting this need, in 2020, a large consortium of investors representing more than \$100 trillion in global assets under management called on companies and their auditors to consider climate in their 2020 financials and audits thereof.¹⁹⁵

Investors will use this information in the way that they use other information about assumptions and estimates. Accounting and disclosure standard setters have reiterated that information about how management has considered climate-related matters may be material with respect to the judgments and estimates that management has made.¹⁹⁶ The standard setters have also highlighted a non-exhaustive list of instances where climate-related matters are relevant to estimates and assumptions including:

- Sources of estimation uncertainty, such as estimates of future cash flows when testing an asset for impairment or estimates of expenditures required to settle decommissioning obligations
- Any material uncertainties related to events or conditions that cast doubt upon a company’s ability to continue as a going concern, as well as any significant judgments involved in concluding that no such doubt exists
- The obsolescence of inventory, its selling price, or costs of completion, as well as how those inform the net realizable value of inventory
- The estimated residual value and expected useful lives of assets, because of obsolescence, legal restrictions, or inaccessibility
- Exposure to credit losses caused by severe weather and transition activities’ effects on a borrower’s ability to meet debt obligations or the value of collateral

¹⁹⁵ See Principles for Responsible Investment (PRI). 2020. “Investor Groups Call on Companies to Reflect Climate-Related Risks in Financial Reporting.” PRI, September 16, 2020. <https://www.unpri.org/accounting-for-climate-change/investor-groups-call-on-companies-to-reflect-climate-related-risks-in-financial-reporting/6432.article>.

¹⁹⁶ International Financial Reporting Standards Foundation (IFRS). 2020. “Effects of Climate-Related Matters on Financial Statements.” IFRS, November, 2020. <https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf#:~:text=IFRS%20Standards%20do%20not%20refer%explicitly%20to%20climate-related,significant%20judgements%20and%20estimates%20that%20%20has%20made>; Financial Accounting Standards Board (FASB). 2021. “Intersection of Environmental, Social, and Governance Matters with Financial Accounting Standards.” FASB, March 19, 2021. https://www.fasb.org/page/ShowPdf?path=FASB_Staff_ESG_Educational_Paper_FINAL.pdf&title=FASB%20Staff%20Educational%20Paper-Intersection%20of%20Environmental. See also International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation. <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

US GAAP also already requires discussion of estimates when it is reasonably possible that the estimates will change within one year and that the change will be material.¹⁹⁷ For industries with significant exposure to either the effects of changing climate (e.g., agriculture, real estate), the energy transition (e.g., oil and gas, petrochemicals), or both (e.g., finance, insurance), this likely already requires nearly annual updating and disclosure of changes to key assumptions.

The effect of climate risk on financial assumptions and estimates is not hypothetical. The past years have seen several large oil and gas companies report climate-related asset impairments. In 2020, both bp and Shell announced multi-billion dollar writedowns based on lowered long-term price assumptions, which investment analyst Wood Mckenzie described as sending “a message about stranded assets.”¹⁹⁸ In 2021, Exxon announced that it was reviewing oil and gas properties for risk of impairment due to climate change. Investors would be better protected if they could understand how management is incorporating climate change into financial assumptions and estimates before an impairment happens. To do that, they need the disclosures required by current accounting standards and codified in the Proposal.

Some auditors outside the U.S. are also beginning to recognize the way that climate-related matters can affect key assumptions and estimates. For instance, Shell’s auditor under ISA standards has highlighted the audit risk posed by the possibility that critical accounting estimates or judgments did not reflect material climate risks.¹⁹⁹ The auditor identified critical accounting judgments and estimates impacted by climate risks and the energy transition, including the estimation of oil and gas reserves, the useful economic lives of assets, the recognition of decommissioning and restoration obligations, and climate change-related litigation. Many of these assumptions are influenced by the estimation of future oil and gas prices, which the auditor noted is subject to increased uncertainty.

Yet, to date, only a small percentage of registrants in the most climate-impacted industries who report using US GAAP are disclosing the effect of climate-related risks on their assumptions and estimates.²⁰⁰ A survey by Carbon Tracker found that only 13 percent of companies avoided a rating of “significant concern” based on its assessment of their disclosures.²⁰¹ Despite this deficiency, a review of audits conducted under the PCAOB auditing standard found that none

¹⁹⁷ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres. <https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>.

¹⁹⁸ Wood Mackenzie. 2020. “Shell’s US\$22bn Write Down ‘Signals Fundamental Change.’” Press release, June 30, 2020. [https://www.woodmac.com/press-releases/shell_writes_down_us\\$22bn_in_assets/](https://www.woodmac.com/press-releases/shell_writes_down_us$22bn_in_assets/).

¹⁹⁹ Shell. 2021. *Independent Auditor’s Report*. London: Shell. <https://reports.shell.com/annual-report/2021/consolidated-financial-statements/independent-auditors-report.html>.

²⁰⁰ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 23.

²⁰¹ *Ibid*, at 23.

identified climate matters. Given the direct financial impact these assumptions and estimates have as well as investor interest in the information, it is clear that registrants are failing to disclose material information today. It is the Commission's responsibility to clarify that such disclosure is already required, and within its authority to standardize this requirement via the Proposal.

Clarifying the existing requirement to disclose climate-related assumptions and estimates is also critical for yielding useful information in the proposed metrics. If registrants are not updating their assumptions and estimates to reflect the impacts of climate change, then not only will they not be in compliance with existing requirements, they will also be unable to report climate-related impacts to their financial statements. But if these climate-related assumptions and estimates are in place, as they already should be, it will be easier for investors to understand how registrants reached the conclusions they did elsewhere in the financial statements.

Similarly, the required disclosure of estimates and assumptions has an important link with new climate-related disclosure requirements in Regulation S-K. As discussed, requiring disclosure of how climate risks affect the calculation of audited financial statements will help keep the discussion mandated by the additions to Chapter 229 from becoming a boilerplate recitation with no tie to the registrant's financial condition.

82. Should we instead require disclosure of only significant or material estimates and assumptions that were impacted by the climate-related events and transition activities? Alternatively, should we require disclosure of only estimates and assumptions that were materially impacted by the climate-related events and transition activities?

The Commission should not explicitly require disclosure of only significant or material estimates and assumptions or only estimates and assumptions that were materially impacted.

As discussed in the response to question 81, today there is very little disclosure of climate-related effects on changes to estimates and assumptions. This is true despite overwhelming investor demand, identification of climate change as a risk factor by many companies,²⁰² similar indications by some non-U.S. auditors that climate issues may be material, and statements from the Commission and accounting and auditing standards bodies that disclosure of such estimates is required if they are material. Based on this experience, leaving the materiality assessment to individual companies risks failing to produce decision-useful information that investors and other market participants need to assess climate risk.

Additionally, where consideration of climate risks for a materially exposed business has not led

²⁰² Proposal at 21422.

to quantitatively material adjustments to the financial statements, this is also material information for investors that an issuer should disclose.

83. Should we instead require disclosure of financial estimates and assumptions impacts by a subset of climate-related events and transition activities, such as not requiring disclosure related to identified climate-related risks or only requiring disclosure with respect to a subset of severe weather events and natural conditions? If so, how should the subset be defined?

The Commission should not limit disclosure of financial estimates and assumptions to a subset of risks.

As discussed in the response to question 81, disclosure of climate-related estimates and assumptions is already required by existing accounting standards. Any limitation adopted pursuant to this question would reduce the current level of required disclosure.

As discussed in question 74, the additions to Regulation S-X would be most decision-useful if they complement each other. Investors and other market participants can better assess and compare the financial statement metrics and expenditure metrics when they also understand the changes to estimates and assumptions that underlie those impacts.

84. Should we instead utilize terminology and thresholds consistent with the critical accounting estimate disclosure requirement in 17 CFR 229.303(b)(3), such as “estimates made in accordance with generally accepted accounting principles that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on the financial condition or results of operations of the registrant”? If so, should we only require disclosures of whether and how the climate-related events and transition activities impacted such critical accounting estimates? Should we require only a qualitative description of how the estimates and assumptions were impacted by the climate-related events and transition activities, as proposed? Should we require quantitative disclosures as well? If so, should we require such disclosure only if practicable or subject to another qualifier?

The Commission should not require disclosure of only “whether and how” climate-related events and transition activities affected critical accounting estimates, and should not require only quantitative disclosure.

For the reasons outlined in the response to question 81, the Commission should require disclosure of all financial assumptions and estimates affected by or at risk from climate change, in part because it forms the basis for other reported financial information. For investors and other

market participants to be able to understand how a registrant applies those estimates and to compare them across registrants, they need quantitative disclosures.

86. For the proposed financial statement metrics, should we require a registrant to disclose material changes in estimates, assumptions, or methodology among fiscal years and the reasons for those changes? If so, should we require the material changes disclosure to occur on a quarterly, or some other, basis? Should we require disclosure beyond a discussion of the material changes in assumptions or methodology and the reasons for those changes? Do existing required disclosures already elicit such information? What other approaches should we consider?

The Commission should require registrants to disclose material changes in estimates, assumptions, or methodology among fiscal years.

There are existing requirements to disclose on a rapid and current basis any additional information about material changes in the financial condition or operations of a registrant that differs from what is set forth in the annual reports.²⁰³ The Commission should enforce these requirements for disclosure of estimates and assumptions consistently with disclosure requirements for other topics.

For the reasons discussed in the response to question 55, it is decision-useful for investors and other market participants to have complete historical information on climate-related impacts included in the financial statements. The effects of climate-related matters on estimates and assumptions matter for understanding the current year financial statement and current valuations of future cash flows—a critical measure of many corporate assets that are not traded on active markets. Any changes to those assumptions and estimates matter for understanding how the trend data presented by including previous historical years have changed. A registrant should disclose those changes in line with requirements for other material changes in estimates, assumptions, or methodology among fiscal years, but no later than in the annual statement of the year following the change.

87. We are proposing to require the financial statement metrics to be disclosed in a note to the registrant's audited financial statements. Should we require or permit the proposed financial statement metrics to be disclosed in a schedule to the financial statements? If so, should the metrics be disclosed in a schedule to the financial statements, similar to the schedules required under Article 12 of Regulation S-X, which would subject the disclosure to audit and ICFR requirements? Should we instead require the metrics to be disclosed as supplemental financial

²⁰³ 17 U.S.C. 78m(l).

information, similar to the disclosure requirements under FASB ASC Topic 932-235-50-2 for registrants that have significant oil- and gas-producing activities? If so, should such supplemental schedule be subject to assurance or ICFR requirements?

The Commission should require disclosure of financial statement metrics as a note to the financial statements that are subject to audit and ICFR requirements.

As discussed in the Proposal, the proposed disclosures share characteristics with other financial statement disclosures that are subject to audit and ICFR requirements.²⁰⁴ The metrics are intended to provide decision-useful information related to the specific line items in the audited financials. That means they should be subject to the same level of assurance as those financial statements.

As mentioned in the response to question 88, the metrics are intended to follow the structure of the existing financial statements, including line items. Putting the disclosures in a note will accomplish this goal. Putting them in a separate schedule or in supplemental financial information could cause confusion or misunderstanding about how the information relates to those financials.

88. Instead of requiring the financial statement metrics to be disclosed in a note to the registrant's audited financial statements, should we require a new financial statement for such metrics? For example, should a "consolidated climate statement" be created in addition to the consolidated balance sheets, statements of comprehensive income, cash flows, and other traditional financial statements? Would including the proposed metrics in a new financial statement provide more clarity to investors given that the metrics are intended to follow the structure of the existing financial statements (including the line items)? What complications or unintended consequences may arise in practice if such a climate statement is created?

The Commission should disclose financial statement metrics in a note to the audited financial statements, as proposed.

An important purpose of the proposed disclosures is to integrate climate reporting and put it into the broader context of a registrant's business. Disclosing the proposed financial statement metrics in a note to the audited financial statements reinforces the connection between climate change and the registrant's financial performance. In contrast, adopting a separate climate statement would not accomplish this goal as effectively. It would instead treat climate change's impacts as separate from other financial statement disclosures. For the reasons discussed in question 87, it could also weaken the link between climate-related financial statement impacts

²⁰⁴ Proposal at 21373.

and the financial statement line items they affect.

89. Should we require the disclosure to be provided outside of the financial statements? Should we require all of the disclosure to be provided in the proposed separately captioned item in the specified forms?

The Commission should disclose financial statement metrics in a note to the audited financial statements, as proposed.

For the reasons discussed in the responses to questions 52 and 59, disclosure of climate-related risks is within the Commission’s mandate and authority in part because of their direct impact on a registrant’s financial condition. As discussed above, the Commission can recognize this critical linkage by requiring disclosure of climate impacts on the financial statements, and providing a level of reliability commensurate to what is required for the financial statements.

90. Should we require any additional metrics or disclosure to be included in the financial statements and subject to the auditing and ICFR requirements as described above? For example, should any of the disclosures we are proposing to require outside of the financial statements (such as GHG emissions metrics) be included in the financial statements? If so, should such metrics be disclosed in a note or a schedule to the financial statements? If in a schedule, should such schedule be similar to the schedules required under Article 12 of Regulation S-X and subject to audit and ICFR requirements? Should we instead require the metrics to be disclosed as supplemental financial information in a supplemental schedule? If so, should such supplemental schedule be subject to assurance or ICFR requirements?

The Commission should include GHG emissions metrics as a note to the financial statements, subject to audit and ICFR requirements.

Although not themselves financial, a registrant’s GHG emissions and their projected trajectory will have significant implications for many financial statement items, as discussed further in questions 1 and 93. Emissions levels are critical for assessing the assumptions and estimates behind the future viability of long-lived assets or the net realizable value of a registrant’s inventory, especially in a high-emissions industry.²⁰⁵ Registrants with plant, property, and equipment (PPE) emissions in excess of industry averages or subject to government emissions limits may project those assets to become rapidly devalued or face elevated asset retirement

²⁰⁵ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres.
<https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>, at 8.

obligations if the energy transition follows several plausible paths. Those registrants with products embedded in carbon-intensive value chains risk losing access to critical inputs or having the markets for their product dry up as the transition progresses, which can also affect estimated returns on capital. In some cases, a company's ability to function as a going concern may be tied to its ability to put forward a credible plan for reducing emissions, or to deliver on existing emissions reductions commitments. Investors will have a range of views about the long run level of global emissions and the speed of the social, political, economic, and scientific changes in the energy transition. Having access to and confidence in a registrant's emissions levels will help investors make investments that match their particular thesis.

Because GHG emissions have implications for a registrant's current and future financial condition, the optimal location for their disclosure is within the notes to the financial statement. Including them there will make the link more explicit, allow investors to see all of the drivers of climate-related financial impacts in context, and provide a level of assurance commensurate with other financial estimates and assumptions.

91. Under the proposed rules, PCAOB auditing standards would be applicable to the financial statement metrics that are included in the audited financial statements, consistent with the rest of the audited financial statements. What, if any, additional guidance or revisions to such standards would be needed in order to apply PCAOB auditing standards to the proposed financial statement metrics? For example, would guidance on how to apply existing requirements, such as materiality, risk assessment, or reporting, be needed? Would revisions to the auditing standards be necessary? What additional guidance or revisions would be helpful to auditors, preparers, audit committee members, investors, and other relevant participants in the audit and financial reporting process?

The PCAOB should confirm that existing auditing standards cover climate-related matters such as materiality, risk assessment, and reporting and issuing a new climate standard to tie together the existing requirements and the new metrics set forth in the Proposal.

Despite the importance of and demand for an assessment of climate's impact on the financial statements, most PCAOB-covered audits have not visibly addressed this issue. As discussed in the response to question 81, most registrants have not disclosed the material impacts that climate-related matters and transition activities have had on their business. Meanwhile, as discussed in question 52, several commenters have expressed concerns that adopting the climate-related disclosures, either as proposed or in a similar form, would negatively impact their access to capital. That means that they are currently not disclosing information that investors would find material. Yet, every PCAOB audit report reviewed by Carbon Tracker, all of which related to highly carbon-intensive companies, raised significant concerns and not one discussed

climate change. This is especially concerning because impairment of tangible or intangible assets, which is strongly linked to climate risk, is the most frequent topic covered in key or critical audit matters.²⁰⁶

To remedy this gap, PCAOB should immediately issue guidance calling on auditors to consider climate-related risks as part of their audits under existing requirements. The guidance could follow the format raised by the International Auditing and Assurance Standards Board (IAASB). That organization's 2020 guidance specifically instructed auditors to consider how all entities might be affected by climate change, because of supply chains, customers, financing, insurance, and laws and regulations.²⁰⁷ The IAASB then highlighted specific existing auditing standards where auditors could consider the implications of climate-related risks, including materiality, response to assessed risks, and auditing accounting estimates and related disclosures. Audits performed under IAASB standards are far more likely to identify climate-related key audit matters than those performed under PCAOB standards.²⁰⁸

The PCAOB guidance should also highlight key consistency checks across company reporting, such as a comparison of any stated emissions reductions goals and the effect achieving those goals would have on financial statement items. The guidance could also cover a number of issues raised in Carbon Tracker's report such as: reliance on management's own specialists for high risk areas, lack of consistency checks across different required disclosures, lack of reporting of Critical Accounting Matters related to climate, and the removal of climate discussion from the PCAOB version of audit reports for foreign private issuers.²⁰⁹ All of these issues should raise doubts about the accuracy of audits of climate-related matters. The guidance should help ensure that future assessments of climate-related matters meet the level of independence and diligence required elsewhere in the audit. Once PCAOB adopts this guidance confirming existing requirements, it should also make it a point of emphasis in its inspections program.

The PCAOB should also begin preparing additional guidance for reviewing the form and content of disclosures made under the proposed rule. The standard should reiterate what is already required and apply it in the context of reviewing the newly required financial metrics and disclosures.

²⁰⁶ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.

<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 31.

²⁰⁷ International Auditing and Assurance Standards Board (IAASB). 2020. "The Consideration of Climate Related Risks in an Audit of Financial Statement." IAASB, October 2020.

<https://www.ifac.org/system/files/publications/files/IAASB-Climate-Audit-Practice-Alert.pdf>, at 3.

²⁰⁸ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.

<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>, at 30.

²⁰⁹ International Auditing and Assurance Standards Board (IAASB). 2020. "The Consideration of Climate Related Risks in an Audit of Financial Statement." IAASB, October 2020.

<https://www.ifac.org/system/files/publications/files/IAASB-Climate-Audit-Practice-Alert.pdf>, at 33.

93. How would investors use GHG emissions disclosures to inform their investment and voting decisions? How would such disclosures provide insight into a registrant’s financial condition, changes in financial condition, and results of operations? How would such disclosures help investors evaluate an issuer’s climate risk-related exposure? Would such disclosures enable investors to better assess physical risks associated with climate-related events, transition risks, or both types of risks?

Institutional investors, retail investors, and other data users would use GHG emissions disclosure to inform their investment practices, asset valuation, voting decisions, and analysis.

Institutional investors have demonstrated clear interest in GHG emissions reporting. Not only does this information inform their investment and voting decisions, but through initiatives like Climate Action 100+, they are spending significant time and resources on shareholder engagement and proposals to secure GHG emissions disclosures and emissions reduction commitments. During the 2021 proxy season, there were 147 climate-related resolutions filed, with 47 going to a vote. Vote results averaged 40 percent support, and six of the 14 shareholder proposals flagged by Climate Action 100+ won majority votes.²¹⁰

Many retail investors, despite lacking the resources of institutional investors, also seek GHG emissions information and would factor it into their investment decisions:

- 42 percent of retail investors would factor in greenhouse gas emissions produced by a corporation’s products and supply chain into their investment decisions if that information was standardized, free, and easy to find.²¹¹
- 41 percent of investors would factor in greenhouse gas emissions produced by a corporation’s day-to-day operations into their investment decisions if that information was standardized, free, and easy to find.²¹²

²¹⁰ Climate Action 100+. 2021. *2021 Year in Review: A Progress Update*. Asia Investor Group on Climate Change, Ceres, Investor Group on Climate Change, Institutional Investors Group on Climate Change, Principles for Responsible Investment. <https://www.climateaction100.org/wp-content/uploads/2022/03/Climate-Action-100-2021-Progress-Update-Final.pdf>.

²¹¹ Americans for Financial Reform Education Fund (AFR EF) and Public Citizen. 2022. “Results of a Nationwide Survey: Retail Investors’ Support for the SEC Mandating Climate-Related Financial Disclosures from Public Companies.” AFR EF and Public Citizen, April 28, 2022. https://ourfinancialsecurity.org/wp-content/uploads/2022/04/FINAL-Report_Climate-Disclosure-Survey-Results_AFR-PC-2.pdf.

²¹² *Ibid.*

- 37 percent of investors would factor in greenhouse gas emissions produced by activities funded by banks’ and financial institutions’ investments and loans into their investment decisions if that information was standardized, free, and easy to find.²¹³

GHG emissions are a comprehensive, comparable indicator of transition risk. MSCI Global Head of ESG Research Linda Eling-Lee has said that GHG emissions data “are going to be the most useful” among the Commission’s proposed disclosures.²¹⁴ Investors can use emissions data to evaluate a registrant’s vulnerability to transition risks such as greenhouse gas-related taxation, regulation, litigation and reputational damage, changes to consumer, employee, or other market participant behavior, and shareholder pressure. As discussed in the response to question 90, investors also need emissions data to understand and evaluate a registrant’s climate-related financial assumptions and estimates.

Scope 3 emissions are a critical part of GHG disclosures, and inform investment and voting decisions by providing unique insights into registrants’ transition risks.

Under current reporting requirements, Scope 3 emissions disclosures in particular are inconsistent, incomplete, and unreliable (see our responses to questions 4 and 98). This causes significant problems for investors and other market participants who are reasonably seeking greater transparency regarding transition risks and consider GHG emissions a key indicator. By mandating Scope 3 emissions disclosures for all registrants, with appropriate and reasonable timelines for compliance, the Commission would ensure that investors and others have the reliable, timely information they need for investment and voting decisions.

Many investors view a company’s GHG emissions data—including Scope 3—as significantly correlated with financial performance. A recent meta-analysis found that low-carbon equity investment strategies were associated with better returns in 65 percent of the studies analyzed.²¹⁵ Over time, as the transition accelerates, investors seeking to evaluate competing low-carbon equity investment strategies will increasingly need comprehensive, reliable emissions data. Mandatory Scope 3 disclosures will be crucial to meeting this investor need.

Investors and other market participants are calling for more consistent and reliable Scope 3 disclosures.

²¹³ *Ibid.*

²¹⁴ Morgan Stanley Capital International (MSCI). 2022. “Coal Expansion and the SEC’s Big Climate Move.” Podcast, March 25, 2022.

<https://www.msci.com/research-and-insights/podcasts/esg-now/coal-expansion-and-sec-big-climate-move>.

²¹⁵ Whelan, Tensie, Ulrich Atz, Tracy Van Holt, and Casey Clark. 2021. *ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015–2020*. Rockefeller Asset Management and NYU Stern Center for Sustainable Business.

https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf.

The inconsistent accounting methodology, lack of disclosure, and gaps in Scope 3 emissions data within the capital markets have generated significant concern among investors and other market participants. For example, in its Net Zero Company Benchmark, the Climate Action 100+ investor group, representing \$68 trillion in assets, assessed the performance of 166 major companies against the initiative's three high-level goals (emissions reduction, governance, and disclosure) and found that just 42 percent of focus companies included Scope 3 emissions within their climate targets. Noting that Scope 3 emissions are often the largest share of a company's carbon footprint, the study concluded that such emissions should become a priority focus for investor engagements.²¹⁶

Similarly, in March 2022, investors representing \$4.7 trillion in assets under management called upon the Commission to mandate Scope 3 disclosures, stating:

Failure to require disclosure and reporting of Scope 3 emissions is ... likely to result in the largest source of emissions remaining unaccounted for in company reporting and unaddressed in company activities. This in turn impacts a wide variety of actors that rely on accurate and consistent emissions information including investors, banks, insurers, and policy makers.

Partial reporting of Scope 3 emissions, which we are seeing today, can also be misleading to investors. Without rules requiring reporting on all 15 Scope 3 categories, investors may assume that a company reporting its Scope 3 emissions is reporting in full, while in reality, it is reporting only a fraction of such emissions.²¹⁷

In a February 2022 report, CDP found that 71 percent of companies disclosing to CDP reported their Scope 1 and 2 emissions, while only 20 percent reported on Scope 3 emissions. According to CDP, because Scope 3 emissions are more than 11 times higher than operational emissions on average, action on these emissions is urgently needed.²¹⁸

In a recent report, investment analytics firm Scope SE & Co. assessed the emissions disclosures of 2,000 of the world's largest companies and found that more than three-quarters of firms were not disclosing any information on Scope 3 emissions.²¹⁹ Commenting on the report, Udo Riese, Global Head of Risk and Monitoring at Allianz Investment Management, stated that this limited

²¹⁶ *Ibid.*

²¹⁷ As You Sow. 2022. "75 Investors With \$4.7 Trillion AUM Weigh in on Upcoming SEC Climate Disclosure Rulemaking." Press release, March 8, 2022.

<https://www.asyousow.org/press-releases/2022/3/8/sec-climate-disclosure-rulemaking>.

²¹⁸ CDP Global. 2022. *Engaging the Chain: Driving Speed and Scale (CDP Global Supply Chain Report 2021)*. CDP Global. <https://www.cdp.net/en/research/global-reports/engaging-the-chain>.

²¹⁹ Menville, Diane, Thomas Lorans, and Wera von der Osten. 2021. "Greenhouse-Gas Emissions: Corporate Disclosure Falls Short of ESG Reporting Standards." Scope Ratings, February 3, 2021.

<https://www.scoperatings.com/ScopeRatingsApi/api/downloadstudy?id=57d2d766-2d6f-49ff-99f9-bc5114d67a5f>.

availability of Scope 3 data poses a problem for asset owners attempting to address transition risk, and called for a granular look at certain sectors now, with broader Scope 3 emissions data collection over time as data and reporting capabilities improve.²²⁰

In its October 2020 report, the Working Group on Climate Change and Finance (co-chaired by Mark Carney and Janet Yellen) found that climate disclosures “remain far from the scale” necessary for investors seeking to reduce transition and physical risk to be effective in doing so.²²¹ According to the authors, such disclosures must “include information on the financial impact of a range of both transition and physical risk scenarios, as well as information on current Scope 1, 2, and 3 emissions and forward-looking targets.”²²² Moreover, “given the complexity in estimating Scope 3 emissions, companies should also set out the methodologies they use for assessing current Scope 3 emissions.”²²³

Institutional investor Wellington Management explains succinctly the problems that registrants’ failures to disclose Scope 3 emissions are posing for investors seeking to price transition risk:

Scope 3 emissions dwarf Scope 1 and Scope 2 in many industries, including outside of fossil-fuel-heavy sectors. With more than 80% of companies not yet reporting Scope 3, it’s no wonder the market cannot assess — or price — risks associated with the low-carbon transition.²²⁴

Scope 3 disclosures are needed by investors and other market participants concerned about deceptive pledges to reduce transition risk.

One of the chief reasons why addressing incomplete Scope 3 disclosures must be a priority of the Commission is that these disclosures take place in the context of widespread deception around companies’ net-zero pledges and related commitments to reduce GHG emissions and transition risk.

According to the United Nations, nearly 1,400 global companies have signed a net-zero or similar pledge to align operations with the international target of limiting global temperature increase to 1.5°C.²²⁵ Yet Net Zero Tracker finds that only 32 percent of corporate net-zero targets

²²⁰ Hawker, Emmy. 2022. “Shortcomings in Scope 3 Data Limit Asset Owner Ambition.” *ESG Investor*, January 26th, 2022. <https://www.esginvestor.net/shortcomings-in-scope-3-data-limit-asset-owner-ambition/>.

²²¹ Group of Thirty’s Steering Committee and Working Group on Climate Change and Finance. 2020. *Mainstreaming the Transition to a Net-Zero Economy*. Washington, DC: Group of Thirty.

https://group30.org/images/uploads/publications/G30_Mainstreaming_the_Transition_to_a_Net-Zero_Economy.pdf

²²² *Ibid.*

²²³ *Ibid.*

²²⁴ Murphy, Erika. 2021. “Has Climate Transition Risk Been Priced Into Equities?” Wellington Management, July 2021. <https://www.wellington.com/en-gb/intermediary/insights/green-equities-climate-change-stocks-funds>.

²²⁵ United Nations. N.d. “For a Livable Climate: Net-Zero Commitments Must Be Backed by Credible Action.” Climate Action. Accessed June 13, 2022. <https://www.un.org/en/climatechange/net-zero-coalition>.

cover the entirety of Scope 3 emissions, 25 percent of targets only partially cover Scope 3, and the remainder do not cover Scope 3 emissions at all.²²⁶ Because Scope 3 emissions are outside the scope of their pledges and data collection and reporting, these companies are failing to comprehensively assess and manage their transition risk, and are often ignoring these risks when engaging with investors.

Reflecting the growing concern about deceptive net-zero pledges by non-state actors, in March 2022 UN Secretary-General Antonio Guterres launched an expert group to develop stronger and clearer standards.²²⁷

In the same month, the Science Based Targets initiative (SBTi) announced that fossil fuel companies would no longer be eligible for certification of their net-zero plans until credibility problems were addressed.²²⁸ SBTi also announced that it will change its approach to financial institutions, only verifying their emissions targets if they include clear limits on financing oil, gas, and coal. According to Nate Aden, who heads SBTi's financial industry project, "We are in a situation now where you've got some of these net-zero initiatives that aren't taking a very rigorous approach here, and it is starting to become a credibility issue."²²⁹

A recent analysis explained why investor attention to Scope 3 disclosures is justified to an even greater extent than with other emission disclosures. Assessing recent corporate emissions reports, it found that while disclosures of Scope 1 and 2 emissions were improving rapidly, disclosures of Scope 3 emissions remained weak and inconsistent. "It's quite possible that a company's plan for surviving the transition to a decarbonized economy is watertight," the author concludes, "but in the absence of disclosed data, you have no way of distinguishing genuine foresight from convenient flimflam."²³⁰

Deceptive pledges to reduce GHG emissions are taking place within the context of the larger problem of greenwashing in capital markets. Concerns about such greenwashing are being

²²⁶ Net Zero Tracker. 2022. "Post-COP26 Snapshot." Accessed June 13, 2022.

<https://zerotracker.net/analysis/post-cop26-snapshot/>.

²²⁷ United Nations Secretary-General. 2022. "Expert Group on the Net-Zero Emissions Commitments of Non-State Entities." Statement, March 31, 2022.

<https://www.un.org/sg/en/content/sg/personnel-appointments/2022-03-31/expert-group-the-net-zero-emissions-commitments-of-non-state-entities%C2%A0>.

²²⁸ Hallez, Emile. 2022. "SBTi Excludes Oil and Gas Companies." *Investment News*, March 10, 2022.

<https://www.investmentnews.com/sbti-excludes-oil-and-gas-companies-218420>.

²²⁹ Schwartzkopf, Frances. 2022. "Bankers Warned of 'Credibility Issue' Amid Dubious CO2 Goals." *Bloomberg*, April 20, 2022, sec. Green.

<https://www.bloomberg.com/news/articles/2022-04-20/bankers-with-bad-co2-targets-face-certification-crackdown#xj4y7vzkg>.

²³⁰ Fickling, David, and Elaine He. 2020. "The Biggest Polluters Are Hiding in Plain Sight." *Bloomberg*, September 30, 2020, sec. Opinion.

<https://www.bloomberg.com/graphics/2020-opinion-climate-global-biggest-polluters-scope-3-emissions-disclosures/?sref=yv2coi81>.

vocalized by market participants themselves: an April 2022 Harris Poll finds that 72 percent of senior executives of North American companies surveyed believe that their *own companies* are guilty of greenwashing.²³¹

Accounting firm PwC is among those noting the impact of this greenwashing on investors, expressing the view that investors may be unable to distinguish between companies with these real commitments and those engaged in greenwashing about their GHG emissions reductions:

Investors don't want to place their capital in a company that has painted a potentially misleading picture of its value proposition, so by providing accurate, comparable information that clearly demonstrates the business's commitment to climate change and other ESG efforts, companies are more likely to attract investors who now better understand the climate risks associated with the business.

Since the proposed rule [on climate risk disclosure] raises the bar on disclosure quality, it can help distinguish between companies doing the right things around their business model—the quality of their processes, technology and transformation—from companies that are 'greenwashing' and making commitments without investing in the business transformation to meet their goals.²³²

Cynthia Curtis of Jones Lang LaSalle, a global commercial real estate services company, said at an April 2022 Ceres webinar that her firm supports the SEC's proposed rule because it believes there is a "need to find guard-rails for greenwashing," "transparency is healthy for markets," and there is a need for increased standardization.²³³

Recently, asset managers have joined the chorus of those expressing concerns about public companies' emissions reporting. In March 2022, Goldman Sachs Asset Management announced it will take a harder line in voting on directors at companies that do not disclose enough about their emissions. It threatened to cast proxy votes against directors, such as those on audit

²³¹ Freedman, Andrew. 2022. "Global Executives Suspect Their Own Companies of "Greenwashing."" *Axios*, April 13, 2022, sec. Energy & Environment.

<https://www.axios.com/2022/04/13/executives-greenwashing-sustainability-progress>.

²³² Bricker, Wes. 2022. "ESG Controller: The Position You Didn't Know You Needed." *Financial Executives International* (FEI), April 12, 2022.

<https://www.financialexecutives.org/FEI-Daily/April-2022/ESG-Controller-The-Position-You-Didn-t-Know-You-N.aspx>.

²³³ Gonzalez, Gloria. 2022. "SEC Climate Proposal Seen Having Potential 'Chilling Effect' on Disclosures." *PoliticoPro*, April 12, 2022.

<https://subscriber.politicopro.com/article/2022/04/sec-climate-proposal-seen-having-potential-chilling-effect-on-disclosures-00024847?source=email>.

committees, who have oversight of emissions reporting and are not disclosing enough.²³⁴ Coming from an asset manager with \$2.5 trillion under management, this level of scrutiny highlights the seriousness of demands by investors and other market participants for more comprehensive emissions disclosures.

Deception about emissions reductions is squarely within the Commission's investor protection mandate as well as its mandate to maintain fair, orderly, and efficient capital markets. In the current standardless environment, companies with poor track records on emissions reductions, even if they have made public commitments or adopted transition plans, can obscure this fact from investors, to the detriment of competitors with strong and transparent track records.

Case Study: Banks, Asset Managers, and Insurers

In its April 2021 report, *The Time To Green Finance*, CDP found that emissions associated with financial institutions' investing, lending, and underwriting activities are on average more than 700 times higher than their direct emissions. Virtually all transition risk to which these global financial institutions are exposed come from Scope 3 emissions.²³⁵ (Category 15 of the GHG Protocol for Scope 3 Emissions refers to these as emissions from “investments”; they are often referred to as financed emissions).²³⁶ Yet CDP found that just 25 percent of the 332 financial institutions disclosing through its portal in 2020 reported Scope 3 emissions.²³⁷

Similarly, in an April 2022 blog post, MSCI researchers compared the self-determinations of materiality of Scope 3 emissions by financial companies in their CDP reporting with MSCI's own assessments of the industry's emissions.²³⁸ Whereas MSCI's estimates show that financed emissions (part of category 15) comprised an overwhelming proportion of the financial industry's total carbon footprint, only one out of the 54 financial-sector companies indicated to CDP that they view these emissions as relevant.²³⁹

²³⁴ Kerber, Ross. 2022. “EXCLUSIVE Goldman Sachs Pushes Directors for More Climate Data.” *Reuters*, March 24, 2022.

<https://www.reuters.com/business/environment/exclusive-goldman-sachs-pushes-directors-more-climate-data-2022-03-24/>.

²³⁵ CDP Global. 2021. “Finance Sector's Funded Emissions Over 700 Times Greater than Its Own.” Press release, April 28, 2021.

<https://www.cdp.net/en/articles/media/finance-sectors-funded-emissions-over-700-times-greater-than-its-own>.

²³⁶ Greenhouse Gas Protocol. 2011. *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. Greenhouse Gas Protocol.

https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf.

²³⁷ CDP. “The Time to Green Finance: CDP Financial Services Disclosure Report 2020,” 2020.

<https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/741/original/CDP-Financial-Services-Disclosure-Report-2020.pdf?1619537981>

²³⁸ Watanabe, Kenji, and Umar Ashfaq. 2022. “Which Scope 3 Emissions Will the SEC Deem ‘Material’?” *MSCI* (blog). April 28, 2022. <https://www.msci.com/www/blog-posts/which-scope-3-emissions-will/03153333292>.

²³⁹ *Ibid.*

This lack of transparency is problematic for investors in financial institutions, especially given the controversies surrounding the net-zero pledges being made by these institutions and their broad failures to reduce transition risk. Since the launch of the Glasgow Financial Alliance for Net Zero in November 2021, many of the world’s largest banks, asset managers, and insurers have joined the coalition, thereby pledging to eliminate portfolio emissions. Yet over that same period, banks have provided more than \$600 billion in capital to oil, coal, and gas producers, roughly unchanged from the previous year; major asset managers have maintained investments of about \$550 billion in companies engaged in fossil fuel development.²⁴⁰

Responding to the rising demand from investors and other market participants to address these risks, more than 250 financial institutions,²⁴¹ including thirty in the U.S.,²⁴² have pledged to report their Scope 3 emissions using the methodology established by the Partnership for Carbon Accounting Financials (PCAF); 69 financial institutions representing \$33 trillion have already disclosed these emissions. As the testimonials from companies affirm,²⁴³ PCAF demonstrates a broad recognition by market participants of both the importance and feasibility of Scope 3 disclosures. However, a mandatory disclosure rule is still essential for protecting investors from climate risks, as PCAF itself emphasized in its June 2021 letter to the Commission.²⁴⁴

Scope 3 emissions disclosures are needed to enable investors to evaluate the soundness of a company’s financial statements

Emissions data, including Scope 3 data, serve as an invaluable window into the impact of the ongoing energy transition on a company’s financial statements, as discussed in the response to question 90. This is especially true in carbon-intensive sectors.

Case Study: Oil and Gas Companies

²⁴⁰ Marsh, Alastair. 2022. “Mark Carney Says Putin’s War Is Making Climate Fight Harder.” *Bloomberg*, April 21, 2022, sec. Green.
<https://www.bloomberg.com/news/articles/2022-04-21/mark-carney-says-putin-s-war-is-making-climate-fight-harder/#xj4y7vzkg>.

²⁴¹ Partnership for Carbon Accounting Financials (PCAF). 2022. “PCAF Welcomes 250th Signatory, Growing Global Participation Fourfold in Three Years.” Press release, April 13, 2022.
<https://carbonaccountingfinancials.com/newsitem/pcaf-welcomes-250th-signatory-growing-global-participation-four-fold-in-three-years#newsitemtext>.

²⁴² Partnership for Carbon Accounting Financials (PCAF). 2022. “PCAF Blog: U.S. Securities and Exchange Commission (SEC) Issues Proposed Rule on Climate-Related Financial Disclosures.” *PCAF* (blog). March 23, 2022.
<https://carbonaccountingfinancials.com/newsitem/pcaf-blog-u-s-securities-and-exchange-commission-sec-issues-proposed-rule-on-climate-related-financial-disclosures>.

²⁴³ Partnership for Carbon Accounting Financials (PCAF). 2022. “Testimonials.” Accessed June 14, 2022.
<https://carbonaccountingfinancials.com/testimonials>.

²⁴⁴ Partnership for Carbon Accounting Financials (PCAF). 2021. Letter to the Securities and Exchange Commission re: Input on Climate Change Disclosure, June 11, 2021.
<https://www.sec.gov/comments/climate-disclosure/cl112-8907236-244226.pdf>.

As Ceres points out in its June 2021 *Lifting the Veil* report, the useful lives of assets in oil and gas industry financial statements are closely linked to the pace of the energy transition. The emissions embedded in oil and gas reserves are a key part of the valuation of those assets, and investors therefore naturally have a great interest in oil companies' measurements of the declining emissions trajectories of end users (and company forecasts of those trajectories).²⁴⁵

In its June 2021 letter to the Commission, WK Associates explained why Scope 3 data are critical to investors' understanding of whether oil and gas companies' accounting assumptions align with the realities of emissions-related risks:

In discussions with providers, accurate Scope 3 data from the oil and gas industry was observed to perform a valuable 'check' on aggregate emissions totals, given the downstream effect of refined petroleum products on all transportation activity.

Scenario analysis, such as the services offered for Bloomberg Terminal users and select software providers, requires the use of Scope 3 Greenhouse Gas (GHG) emissions data. Scope 3 emissions can represent the largest source of emissions for companies and present the most significant opportunities to influence GHG reductions. For instance, Scope 3 emissions account for roughly 70-90% of life cycle emissions from oil products and 60-85% of those from natural gas, according to the IEA (International Energy Agency). Further, a July 2020 study of the MSCI ACWI Investable Market Index, which includes roughly 99% of the global equity market, found that the Scope 3 emissions of the integrated oil and gas industry are more than six times the level of its Scope 1 and 2 emissions. In addition, the Scope 3 emissions of the energy sector far outpace those of any other Global Industry Classification Standard (GICS) category, especially with respect to use of products sold.²⁴⁶

In its recent study of climate disclosures in the U.S. oil and gas industry, the Columbia Center for Global Energy Policy reports that most investors in the industry believe these companies should begin reporting Scope 3 emissions. The authors highlight the risks of asset stranding faced by investors:

²⁴⁵ Ross, Samantha. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. Boston, MA: Ceres.
<https://www.ceres.org/sites/default/files/reports/2021-05/Ceres%20Lifting%20the%20Veil%20Oil%20and%20Gas%205.18.pdf>.

²⁴⁶ Schay, Alexander, and Paul Bugala. 2021. Letter to the Securities and Exchange Commission Re: Request for Comment on Climate Change Disclosures, June 14, 2021. W.K. Associates, Inc.
<https://www.sec.gov/comments/climate-disclosure/c1112-8916955-245033.pdf>.

Although no oil and gas company would willingly disclose that its business model is unsustainable and that its reserves are at risk of being stranded in a carbon-constrained world ... companies in the sector currently do not convincingly demonstrate why they anticipate their barrels to be among the last ones produced. ... Most investors believed that oil and gas companies should report their Scope 3 emissions to provide more transparency and information.²⁴⁷

Investors have a clear need to understand the impact of the ongoing energy transition on a company's financial statements, as well as critical estimates and assumptions that form the basis of their projections; mandatory Scope 3 disclosure is an essential part of meeting that need.

Scope 3 disclosures are needed by investors to evaluate opportunities to reduce climate risks through partnerships with suppliers and customers.

One of the key reasons why investors pay attention to climate-related risk is that analysis of this risk often reveals climate-related opportunities. In many sectors, Scope 3 emissions not only highlight risk, they provide a window into cost-effective business opportunities tied to decarbonization of the operations of suppliers and customers.

This point was emphasized by the UN-convened Net-Zero Asset Owner Alliance, members of which hold more than \$10.4 trillion combined capital, when it released its April 2022 roadmap for systematic stewardship for investors seeking to mitigate climate risk. It recommended three areas for investors to expand engagement efforts, including “[s]ector/value chain engagement, whereby investors can leverage insights from corporate engagement to support solutions across industries and sectors.”²⁴⁸

One industry segment where such climate-related opportunities are emerging is in plastics production.

Case Study: Plastics Producers

As SBTi observes, the chemicals sector offers a host of climate opportunities but also a range of climate-related risks. Given their role in low-carbon and energy-saving technologies, chemicals will likely play a central role in the transition to a low-carbon economy. Yet as of 2020, the

²⁴⁷ Wong, Hon Xing, Erin M. Blanton, Dr. Tim Boersma, and Naomi Zimmerman. 2022. *ESG Investing and the US Oil and Gas Industry: An Analysis of Climate Disclosures*. New York: Columbia Center on Global Energy Policy. <https://www.energypolicy.columbia.edu/research/esg-investing-and-us-oil-and-gas-industry-analysis-climate-disclosures>.

²⁴⁸ UN Environment Programme (UNEP). 2022. “‘Change Rules of the Game,’ Asks \$10.4Trn Net-Zero Asset Owner Alliance in New Paper on Investor Action.” UNEP, April 7, 2022. <https://www.unepfi.org/news/asset-owner-alliance/change-rules-of-the-game-asks-10-4trn-net-zero-asset-owner-alliance-in-new-paper-on-investor-action/>.

chemicals value chain is the third-largest industrial sub-sector source of greenhouse gas (GHG) emissions behind cement and steel. Much of this risk is poorly disclosed: despite the fact that the majority of the sector’s emissions are Scope 3, just 11 companies have met SBTi’s criteria with Scope 3 emissions targets.²⁴⁹

In an April 2022 white paper, the Ocean Conservancy, Public Citizen, and Americans for Financial Reform Education Fund analyzed climate risks and mitigation opportunities in a key component of the chemicals sector: plastics producers. Among the numerous reasons why investors in plastics producers need Scope 3 disclosures, the paper highlights the benefits to investors of focusing on both upstream and downstream decarbonization opportunities:

[I]nvestors need Scope 3 emissions data to evaluate whether these registrants are pursuing available opportunities to reduce emissions-related risks. For example, upstream emissions of methane from the production of plastic feedstocks vary significantly; the emissions intensity of a barrel of oil can vary as much as 80% depending on where it is produced. Downstream, the emissions from processing resin varies based on where manufacturing occurs. The emissions associated with plastics manufacturing have doubled since 1995, as an increasing proportion is occurring where coal-based power generation is prevalent. Contrary to the popular misconception that plastics act as a form of carbon sequestration, research shows that emissions from end of life treatment of plastics can be as significant as those from plastic production, particularly if plastics are disposed via waste-to-energy, open burning or incineration of waste, the prevalent disposal strategies in geographies where growth in plastics use is expected.²⁵⁰

To seize on these opportunities to reduce climate risk in supply chains, investors need mandatory Scope disclosures.

²⁴⁹ Aden, Nate, Michiel Stork, and Kylee Chang. 2022. *Barriers, Challenges, and Opportunities for Chemical Companies to Set Science-Based Targets*. Science Based Targets initiative (SBTi).

<https://sciencebasedtargets.org/resources/files/SBTi-Chemicals-Scoping-Document-12.2020.pdf>.

²⁵⁰ Ocean Conservancy, Americans for Financial Reform Education Fund (AFREF), and Public Citizen. 2022. *Reliable Scope 3 Emissions Disclosures are Key to Addressing Climate-Related Financial Risks: A Plastics Industry Case Study*. Ocean Conservancy, AFREF, and Public Citizen.

https://oceanconservancy.org/wp-content/uploads/2022/04/Scope-3-Plastics-Industry-White-Paper_OC-AFR-PC-Apr-2022.pdf;

Gordon, Deborah, Adam Brandt, Joule Bergerson, and Jonathan Koomey. 2015. *Know Your Oil: Creating a Global Oil-Climate Index*. Washington, DC: Carnegie Endowment for International Peace.

https://carnegieendowment.org/files/know_your_oil.pdf; Livia Cabernard, Stephan Pfister, Christopher Oberschelp, and Stefanie Hellweg. 2021. “Growing Environmental Footprint of Plastics Driven by Coal Combustion.” *Nature Sustainability* 5, (December): 139–48. <https://www.nature.com/articles/s41893-021-00807-2>;

Roush, Wade. 2019. “Wait, Plastic Can Be Good for the Environment?” *Scientific American*, December 1, 2019.

<https://www.scientificamerican.com/article/wait-plastic-can-be-good-for-the-environment/>; Energy Transitions Commission. 2020. *Mission Possible: Reaching Net-Zero Carbon Emissions from Harder-to-Abate Sectors by Mid-Century—Sectoral Focus: Plastics*. Energy Transitions Commission.

https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Plastics_final.pdf.

Investors and other market participants cannot rely on EPA’s emissions inventory for Scope 3 data

Some commentators have suggested that the SEC should rely on the EPA with regards to emissions disclosures.²⁵¹ However, EPA’s emissions inventory focuses solely on U.S. emissions from major point sources and suppliers, and is not designed for investor comparisons of U.S. companies, many of which have Scope 2 and Scope 3 emissions from EPA-listed sites as well as value chains that extend beyond the U.S. border.²⁵² Further, much of the transition risk that concerns investors in U.S. companies comes from non-U.S. actions. For example, according to the World Bank, a total of 64 carbon pricing instruments are now in operation around the world, covering more than 20 percent of global GHG emissions; the vast majority of these policies are outside the U.S.²⁵³

The majority of the world’s emissions—53 percent—come from Asia.²⁵⁴ Many of these emissions represent Scope 3 emissions of U.S. companies, and in fact may represent the majority of those companies’ emissions. Investors cannot rely on the EPA’s inventory to track these Scope 3 emissions because they fall outside the purview of the EPA.

In its landmark October 2021 report on financial stability risks from climate change, the FSOC dismissed the notion that the EPA’s inventory would suffice for investors and other market participants:

The EPA’s data collections on GHG emissions may prove difficult for financial firms and regulators to use for financial analysis, reflecting challenges with merging datasets and other factors. For financial analysis, a broader view of emissions intensity—encompassing the full spectrum of direct and indirect, or upstream and downstream, emissions—would provide a fuller picture and enable companies to generate enhanced climate-related disclosures.

94. Should we require a registrant to disclose its GHG emissions both in the aggregate, per scope, and on a disaggregated basis for each type of greenhouse gas that is included in the

²⁵¹ See, e.g., Schlup, Jennifer J., and William Yeatman. 2022. “Climate-Risk Disclosure, Let Me Count the Ways.” *The Hill*, June 8, 2022, sec. Opinion.

<https://thehill.com/opinion/congress-blog/3516475-climate-risk-disclosure-let-me-count-the-ways/>.

²⁵² Environmental Protection Agency (EPA). 2022. “Sources of Greenhouse Gas Emissions.” Updated April 14, 2022. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

²⁵³ World Bank. 2021. “Carbon Prices now Apply to Over a Fifth of Global Greenhouse Gases.” Press release, May 25, 2021.

<https://www.worldbank.org/en/news/press-release/2021/05/25/carbon-prices-now-apply-to-over-a-fifth-of-global-greenhouse-gases>.

²⁵⁴ Ritchie, Hannah. 2019. “Who Emits the Most CO₂ Today?” *Our World in Data*, October 3, 2019. <https://ourworldindata.org/annual-co2-emissions>.

Commission’s proposed definition of “greenhouse gases,” as proposed? Should we instead require that a registrant disclose on a disaggregated basis only certain greenhouse gases, such as methane (CH₄) or hydrofluorocarbons (HFCs), or only those greenhouse gases that are the most significant to the registrant? Should we require disaggregated disclosure of one or more constituent greenhouse gases only if a registrant is obligated to separately report the individual gases pursuant to another reporting regime, such as the EPA’s greenhouse gas reporting regime or any foreign reporting regime? If so, should we specify the reporting regime that would trigger this disclosure?

The Commission should require all registrants to disclose their GHG emissions both in the aggregate, per scope, and on a disaggregated basis for each type of greenhouse gas that is included in the Commission’s proposed definition of “greenhouse gases,” as proposed.

This requirement should not be dependent on whether the registrant is obligated to separately report individual gases pursuant to another reporting regime, but instead should be a general requirement. The disaggregated information will be valuable to investors and much easier to compare if all registrants report in the same manner.

95. We have proposed defining “greenhouse gases” as a list of specific gases that aligns with the GHG Protocol and the list used by the EPA and other organizations. Should other gases be included in the definition? Should we expand the definition to include any other gases to the extent scientific data establishes a similar impact on climate change with reasonable certainty? Should we require a different standard to be met for other greenhouse gases to be included in the definition?

NO_x (nitrogen oxides, NO, and NO₂) emissions should also be disclosed in a separate section of the 10-K, though not added to the list of GHG emissions.

Though not a greenhouse gas itself, NO_x enhances the greenhouse effect at a comparable rate to direct methane emissions through chemical reaction with other atmospheric gases,²⁵⁵ and it is mainly produced by the combustion of fossil fuels, especially through vehicle tailpipe emissions, of particular relevance for oil and transportation companies. In addition, NO_x is highly toxic for humans, causing airway inflammation, coughing and wheezing, reduced lung function, and increased asthma attacks, and new research warns that NO₂ is likely to be a cause of asthma in

²⁵⁵ Lammel, G., and H. Graßl. 1995. “Greenhouse effect of NO_x.” *Environmental Science and Pollution Research International* 2, no. 1 (July): 40–5. <https://pubmed.ncbi.nlm.nih.gov/24234471/>.

children.²⁵⁶ In March 2022, the EPA proposed adopting stricter standards for NOx for heavy duty vehicles. At stakeholder listening sessions regarding these more stringent NOx standards for on-road heavy duty engines, “there was a broad acknowledgement of the value of aligning implementation of new NOx standards with existing milestones for greenhouse gas (GHG) standards under the Heavy-Duty Phase 2 GHG and fuel efficiency program.”²⁵⁷

NOx is a criteria pollutant that also significantly enhances the GHG effect; the EPA is currently considering imposing stricter NOx emissions standards and aligning these with existing GHG standards, and this regulatory development may produce additional climate-related transition risk. In general, climate-related emissions that also affect local air quality and public health likely face enhanced transition risk because public health impacts are a key driver of government and community support for decarbonization.²⁵⁸ These effects are not always neatly separable.²⁵⁹

Because NOx is not itself a GHG, but enhances the GHG effect, it does not have a well-established corresponding global warming potential, though research has estimated this value at 7 to 10 times the CO2 equivalent forcing over a 100-year timeframe.²⁶⁰ NOx emissions should be disclosed without the conversion to CO2 equivalent, given their significant and clearly established warming effect but lack of standardization of an official, consensus global warming potential (GWP) figure to date.

96. Should we require a registrant to express its emissions data in CO2e, as proposed? If not, is there another common unit of measurement that we should use? Is it important to designate a common unit of measurement for GHG emissions data, as proposed, or should we permit registrants to select and disclose their own unit of measurement?

The Commission should require registrants to express emissions data in CO2e for the Proposal’s list of GHGs.

Allowing registrants to disclose additional units of measurement could confuse investors or make difficult direct comparisons between registrants using the common CO2e metric. If the SEC

²⁵⁶ American Lung Association. 2020. “Nitrogen Dioxide.” Updated February 12, 2020. <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/nitrogen-dioxide>; Environmental Protection Agency (EPA). 2016. *Integrated Science Assessment (ISA) for Oxides of Nitrogen—Health Criteria (Final Report, Jan 2016)*. Washington, DC: EPA. <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=310879>.

²⁵⁷ Environmental Protection Agency (EPA). 2020. “Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine Standards.” Proposed Rule, posted January 21, 2020. <https://www.regulations.gov/document/EPA-HQ-OAR-2019-0055-0001>.

²⁵⁸ Surrusco, Emilie Karrick. 2020. “Cancer Alley Rises Up.” Earth Justice, February 14, 2020. <https://earthjustice.org/features/cancer-alley-rises-up>.

²⁵⁹ West, J. Jason, et al. 2013. “Co-Benefits of Mitigating Global Greenhouse Gas Emissions for Future Air Quality and Human Health.” *Nature Climate Change* 3, (September): 885–9. <https://www.nature.com/articles/nclimate2009>.

²⁶⁰ *Ibid.*

decides to allow additional units of measurement that registrants choose to disclose, these must be confined to a separate section of the 10-K or in a note to the primary GHG reporting section. As described above, NOx emissions should be identified by their weight, not converted to a CO2 equivalent.

The Proposal does not identify a preferred or required standard or data set from which to gather GWPs for various gases. GHG Protocol, for example, directs users to draw on the most recent Assessment Report from IPCC²⁶¹ where possible, to use the 100-year potentials, and to disclose if, and if so, how, GWPs were drawn from multiple Assessment Reports. The SEC should direct registrants in a similar manner to use either the most recent Assessment Report from the IPCC or the most recent EPA dataset,²⁶² to use the 100-year potentials, and to disclose if, and if so how, GWPs were drawn from multiple of these sources or others. Relying on the most recent estimates from well-established, credible sources like the IPCC or EPA will improve accuracy and comparability of the reporting. Still, given that using different data sets—or outdated data sets—could frustrate comparison, it’s critical that reasonable assurance standards are required for Scopes 1, 2, and 3 emissions reporting.

97. Should we require a registrant to disclose its total Scope 1 emissions and total Scope 2 emissions separately for its most recently completed fiscal year, as proposed? Are there other approaches that we should consider?

The Commission should require registrants to disclose their total Scope 1 emissions and total Scope 2 emissions separately for their most recently completed fiscal year, as proposed, and any fiscal years contained within their consolidated financial statements.

The transition risks and risk mitigation potential and costs are different for Scope 1 and Scope 2 emissions, so a disaggregated breakdown provides investors with valuable additional information regarding decarbonization opportunities. Scope 1 emissions can be lowered through process intensification, investment in mitigation technologies, and choices regarding products and processes, whereas Scope 2 emissions can be lowered through energy efficiency improvements and clean energy power purchasing. For different businesses in different sectors and regions, these mitigation solutions will come with different costs and benefits.

²⁶¹ Find the most recent values at: Intergovernmental Panel on Climate Change (IPCC) AR6 WG1. 2021. *Chapter 7: The Earth’s Energy Budget, Climate Feedbacks, and Climate Sensitivity - Supplementary Material*. IPCC. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter_07_Supplementary_Material.pdf.

²⁶² Environmental Protection Agency (EPA). 2022. “Emission Factors for Greenhouse Gas Inventories.” Modified April 1, 2022. https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf.

98. Should we require a registrant to disclose its Scope 3 emissions for the fiscal year if material, as proposed? Should we instead require the disclosure of Scope 3 emissions for all registrants, regardless of materiality? Should we use a quantitative threshold, such as a percentage of total GHG emissions (e.g., 25%, 40%, 50%) to require the disclosure of Scope 3 emissions? If so, is there any data supporting the use of a particular percentage threshold? Should we require registrants in particular industries, for which Scope 3 emissions are a high percentage of total GHG emissions, to disclose Scope 3 emissions?

All registrants should be required to disclose Scope 3 emissions. Allowing registrants to avoid disclosure of their Scope 3 emissions based on their own materiality determinations is a failed approach that has deprived investors and other market participants of important, decision-useful information.

The Commission may mandate disclosure of “such other information, and ... such other documents, as the Commission by rules or regulation require as being necessary or appropriate ... for the protection of investors.”²⁶³ The Commission has required disclosure on many topics, such as executive compensation, share buybacks, and environmental proceedings, without regard to specific findings of materiality for each line item or registrant. As Commissioner Lee noted last year, “In practice Regulation S-K has, from the outset, required periodic reports to include information that is important to investors but may or may not be material in every respect to every company making the disclosure. (Citations omitted.)”²⁶⁴

This approach of issuing a clear and specific disclosure mandate is warranted by the results of the 2010 guidance on how registrants should disclose climate change-related risks. The guidance identified a host of climate-related financial risks that would necessitate disclosure by registrants, but only if registrants found them material. Today, roughly 12 years following the issuance of this guidance, its track record is clear. As shown by the Flying Blind report²⁶⁵ and numerous others discussed above, many large U.S. companies, including ones with carbon-intensive business models and thus substantial transition risk, have failed to disclose the impacts of climate-related financial risks on their financial condition. As discussed above, numerous banks, asset managers, and other financial institutions with emissions that are almost entirely Scope 3 have failed to disclose their emissions. The approach of allowing companies to determine for themselves whether their climate-related financial risks are material and therefore subject to

²⁶³ 15 U.S.C. 77j

²⁶⁴ Lee, Allison Herren. “Living in a Material World: Myths and Misconceptions about ‘Materiality.’” Keynote Remarks, 2021 EST Disclosure Priorities Event, Washington, DC, May 24, 2021. US Securities and Exchange Commission. <https://www.sec.gov/news/speech/lee-living-material-world-052421>.

²⁶⁵ Securities and Exchange Commission (SEC). 2010. “Commission Guidance Regarding Disclosure Related to Climate Change.” SEC, February 8, 2010. <https://www.sec.gov/rules/interp/2010/33-9106.pdf>; Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative. <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

disclosure has not yielded the information investors need. The Commission should not repeat this error by continuing with the materiality approach with regard to Scope 3 disclosures as proposed.

Given the systemic risk posed by climate change, Scope 3 disclosures from registrants in all sectors are important to investors.

The implicit message behind the Commission’s materiality-based approach to Scope 3 emissions is that certain companies or sectors may have Scope 3 emissions that are *not* decision-useful to investors. However, there are no studies suggesting that investors believe Scope 3 data from *any* sector lack value for informing their investment and voting decisions.

To the contrary, the systemic climate-related risk facing all companies means that transition risk revealed by Scope 3 emissions is an important concern for investors. The IPCC estimates that \$4 trillion in asset deflation could result if the international target of 2°C is achieved; if the 1.5°C target is achieved, even greater losses will be suffered.²⁶⁶ As the Bank of International Settlements highlighted in its January 2020 Green Swan report, such asset deflation could have a cascading effect across the entire economy, further amplifying losses.²⁶⁷ Investors need a robust disclosure of emissions, including Scope 3 emissions, by all large registrants to evaluate which companies are preparing for this potential disruption and moving to capitalize on the shifts underway. Indeed, given the increasing financial benefits to firms that contribute to the shift to a decarbonized economy, disclosures from registrants with already-reduced emissions are material to investors.

In a June 2017 report, the TCFD notes that in light of wide-ranging transition risks, investors need to be concerned about emissions in the supply chains of even those companies, such as food and beverage companies and fiber processors, that are outside of carbon-intensive industries.²⁶⁸

The ESG ratings firm MSCI likewise believes that Scope 3 disclosures will be important to investors across a wide swathe of industries:

With businesses, governments and investors increasingly focused on a net-zero transition, Scope 3 investment risks are mounting. These risks may come from new regulation of a

²⁶⁶ McDonnell, Tim. 2022. “The Most Important Number in the New IPCC Report Is a Warning to Investors.” *Quartz*, April 5, 2022. <https://qz.com/2150910/the-new-ipcc-report-is-a-4-trillion-warning-to-investors/>.

²⁶⁷ Bolton, Patrick, Morgan Despres, Luiz Awazu Pereira Da Silva, Frédéric Samama, and Romain Svartzman. 2020. *The Green Swan: Central Banking and Financial Stability in the Age of Climate Change*. Basel, Switzerland: Bank for International Settlements (BIS). <https://www.bis.org/publ/othp31.pdf>.

²⁶⁸ Task Force on Climate-Related Financial Disclosures (TCFD). 2021. *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures*. TCFD. <https://www.fsb.org/wp-content/uploads/P141021-4.pdf>.

company's high-emission products and shifts in end-product market demand driven by climate concerns.²⁶⁹

The draft IFRS Climate Disclosure Standard also expressed the view that Scope 3 disclosures are needed by investors in many industries:

Entities in many industries face risks and opportunities related to activities that drive Scope 3 emissions both up and down the value chain. For example, they may need to address evolving and increasingly stringent energy efficiency standards through product design (a transition risk) or seek to capture growing demand for energy-efficient products or seek to enable or incentivise upstream emissions reduction (climate opportunities). In combination with industry metrics related to these specific drivers of risk and opportunity, Scope 3 data can help users evaluate the extent to which an entity is adapting to the transition to a lower-carbon economy. Thus, information about Scope 3 GHG emissions enables entities and their investors to identify the most significant GHG reduction opportunities across an entity's entire value chain, informing strategic and operational decisions regarding relevant inputs, activities and outputs.²⁷⁰

As noted above, in its April 2022 roadmap for systematic stewardship for investors seeking to mitigate climate risk, the Net-Zero Asset Owner Alliance recommended giving priority focus to value chain engagement, citing "systemic" hurdles obstructing decarbonization.²⁷¹ This is an implicit recognition that engagement on Scope 3 emissions is critical to investors across the economic system, not just in a subset of sectors.

Engagement on Scope 3 emissions across the economic system is also important to the asset managers and other fiduciaries acting on behalf of large numbers of institutional investors, retail investors, and retirement savers. Given the full diversification of their investments, these market participants have a strong interest in mandatory disclosure of Scope 3 emissions by all companies and sectors.

The enforceability of an unambiguous disclosure mandate is essential for ensuring Scope 3 disclosures.

²⁶⁹ Baker, Brendan. 2020. "Scope 3 Carbon Emissions: Seeing the Full Picture." Climate Action, October 5, 2020. <https://www.climateaction.org/news/scope-3-carbon-emissions-seeing-the-full-picture>.

²⁷⁰ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation. <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

²⁷¹ UN Environment Programme (UNEP). 2022. "'Change Rules of the Game,' Asks \$10.4Trn Net-Zero Asset Owner Alliance in New Paper on Investor Action." UNEP, April 7, 2022. <https://www.unepfi.org/news/asset-owner-alliance/change-rules-of-the-game-asks-10-4trn-net-zero-asset-owner-alliance-in-new-paper-on-investor-action/>.

The key lesson from implementation of 2010 Guidance is that, without a clear mandate to disclose climate-related information, many registrants choose not to disclose. The Commission’s proposal to avoid a clear mandate with respect to Scope 3 emissions may lead to the foreseeable result of companies declaring those emissions non-material and not disclosing them. As the Sullivan & Cromwell law firm blog shows, there are many companies that do not believe they have any climate risks and are unlikely to conclude that Scope 3 emissions are material:

Starting in September 2021, the SEC began sending comment letters to public companies regarding their climate-related disclosures (both within and outside of their SEC filings). ... Notably, based on publicly available responses, nearly all public companies that responded to the SEC’s comment letters asking for additional disclosure on the basis of the 2021 guidance reported that they do not find climate change-related physical or transition risks to be material to their businesses. (Emphasis added.)²⁷²

The research papers and case studies discussed in the responses to questions 4 and 93 show that even those registrants with substantial Scope 3 emissions and associated transition risk claim that these emissions are not material and prefer not to disclose them.

The availability of the Commission’s enforcement tools is not a good alternative for preventing registrants from making unfounded negative materiality determinations. The Commission has many enforcement priorities and many entities to oversee and would not have capacity to investigate and resolve most issues in a timely manner.

The Commission can easily ensure a better outcome, decrease costs and confusion to registrants from an ill-defined self-assessment of materiality, and eliminate costs to investors from the pursuit of non-disclosed emissions figures, simply by mandating Scope 3 disclosures by all registrants. Establishing a near-term deadline for such disclosures for large registrants (as proposed in the response to question 100) will spur productive work on assembling data important to investors rather than wasteful preparation of self-serving negative materiality determinations. In addition, to deter violations of Scope 3 disclosure requirements, the Commission must commit to investigating and enforcing this rule and all subsequent guidance around climate-related disclosures.

A recent academic analysis of mandatory sustainability reporting finds that enforceable mandates have substantial benefits over discretionary or voluntary reporting, finding (among other

²⁷² Sullivan & Cromwell LLC. 2022. “SEC Proposes Expansive Climate-Related Disclosure Rules.” Sullivan & Cromwell LLC, March 28, 2022. <https://www.sullcrom.com/files/upload/sc-publication-sec-proposes-expansive-climate-related-disclosure-rules.pdf>.

benefits) that mandates help regulators and courts to identify noncompliance.²⁷³ The authors conclude that “a combination of public and private enforcement similar to what we have for financial reporting is necessary for an effective enforcement regime. . . . Such a regime would naturally arise if mandated CSR reporting were embedded in firms’ SEC filings and came with an audit mandate.” (Citation omitted.)²⁷⁴

If the Commission elects not to mandate Scope 3 disclosures by all registrants as recommended, it should require such disclosures if a registrant determines that Scope 3 emissions exceed a percentage threshold.

In the Proposal, the Commission raises the possibility of requiring reporting of Scope 3 emissions if they represent more than 40 percent of total GHG emissions (as called for by the SBTi Scope 3 guidance for target setting criteria²⁷⁵) but does not include that requirement in the proposal because it does not believe a “one size fits all” approach is the best way to screen Scope 3 emissions and determine if they are material. As noted above, the Commission does not need to require any kind of materiality assessment. It has the legal authority to mandate disclosure of all such emissions. It should do so with respect to all registrants for the reasons stated above. In the event that the Commission does not adopt this recommendation, it should adopt a quantitative threshold to avoid the challenges with disclosure under the 2010 guidance. A 40 percent threshold has the firmest basis within existing GHG emissions reporting and target-setting standards.

If neither a mandate nor a threshold is adopted, the Commission should require disclosure of the basis of any determination that Scope 3 emissions are not material. This required disclosure should include a discussion of the ratio of Scope 3 emissions to Scope 1 and Scope 2 emissions within a registrant’s inventory. This negative materiality determination, including estimation of the proportion of Scope 3 emissions to Scope 1 and Scope 2 emissions, should be subject to third-party verification with reasonable assurance.

99. Should we require a registrant that has made a GHG emissions reduction commitment that includes Scope 3 emissions to disclose its Scope 3 emissions, as proposed? Should we instead require registrants that have made any GHG emissions reduction commitments, even if those commitments do not extend to Scope 3, to disclose their Scope 3 emissions? Should we only

²⁷³ Christensen, Hans B., Luzi Hail, and Christian Leuz. 2021. “Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review.” *REview of Accounting Studies* 26, (July): 1176–1248. <https://link.springer.com/article/10.1007/s11142-021-09609-5>.

²⁷⁴ *Ibid.*

²⁷⁵ Labutong, Nicole, and Vincent Hoen. 2018. “How Can Companies Address Their Scope 3 Greenhouse Gas Emissions.” *Science Based Targets initiative (SBTi)* (blog). May 25th, 2018. <https://sciencebasedtargets.org/blog/how-can-companies-address-their-scope-3-greenhouse-gas-emissions>.

require Scope 3 emissions disclosure if a registrant has made a GHG emissions reduction commitment that includes Scope 3 emissions?

If the Commission elects not to mandate Scope 3 disclosures by all registrants as recommended, it should require such disclosures if registrants have made Scope 3 reduction commitments as proposed.

The Commission should require Scope 3 disclosures for all registrants for the reasons stated above. In the event that the Commission does not adopt this requirement, any registrant with a commitment to reduce Scope 3 emissions should be required to annually disclose those emissions as proposed. Although registrants with a commitment to reduce Scope 3 emissions are generally disclosing those emissions under today's reporting requirements, investors in these companies will still benefit from the standardization and comparability of mandatory disclosure. Disclosure in an SEC filing will also create a deterrent against issuing non-rigorous or misleading disclosures—a deterrent that arises due to increased public scrutiny and the Commission's anti-fraud enforcement capability. Requiring such disclosures would be consistent with the approach proposed by the Commission with respect to overarching climate goals and targets: once those goals and targets are established, registrants have an obligation under the Proposal to demonstrate that they are well-supported and not part of a greenwashing effort aimed at deceiving investors and the public.

100. Should Scope 3 emissions disclosure be voluntary? Should we require Scope 3 emissions disclosure in stages, e.g., requiring qualitative disclosure of a registrant's significant categories of upstream and downstream activities that generate Scope 3 emissions upon effectiveness of the proposed rules, and requiring quantitative disclosure of a registrant's Scope 3 emissions at a later date? If so, when should we require quantitative disclosure of a registrant's Scope 3 emissions?

Scope 3 disclosures should be mandatory and, with the exception of small registrants, required on the same timeline as disclosures of Scope 1 and 2 emissions as discussed in the response to question 197.

Investors of all types consider Scope 3 disclosure a critical component of registrants' overall transition risk. Significantly delaying or limiting the Scope 3 disclosure requirement is unnecessary and would decrease the benefits to investors of the Proposal.

Companies are Already Disclosing Scope 3 Emissions without Facing Undue Burdens

Insights shared by registrants already disclosing Scope 3 emissions reveal that they have not faced undue burdens in gathering and reporting these data and have benefited from the value chain engagement that this process entails.

The GHG Protocol provides two examples of how companies interested in disclosing Scope 3 emissions obtained the necessary data and benefitted from the exercise:

- National Grid: “After developing the full scope 3 inventory, a clear picture appeared with emissions from the use of sold products emerging as by far the biggest source of scope 3 emissions. This valuable insight helped National Grid understand the full impact of its business operations and provided more focused direction for future strategies and targets.”²⁷⁶
- SC Johnson: “As a result of the scope 3 inventory effort, SC Johnson has initiated a process to incorporate scope 3 results into its sustainability program objective development, and has initiated outreach programs with its suppliers to help foster GHG improvements.”²⁷⁷

Data management firm Workiva²⁷⁸ offers four examples of companies that have reported Scope 3 emissions in their Form 10-Ks:

- Footwear maker Allbirds, whose 10-K filed for the year ending December 31, 2021, included 2020 emissions estimates²⁷⁹
- Craft marketplace Etsy, which started including Scope 3 emissions in 10-Ks in February 2019²⁸⁰
- United Airlines, which disclosed Scope 3 emissions data in a table format²⁸¹
- Forestry company Weyerhaeuser, whose disclosure came within its narrative on environmental, social, and governance (ESG) practices²⁸²

²⁷⁶ Greenhouse Gas Protocol. 2011. *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. Greenhouse Gas Protocol.

https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf.

²⁷⁷ *Ibid.*

²⁷⁸ Mazing, Nick, and Steve Soter. 2022. “Scope 3 in 10-Ks: 4 Companies That Have Been There, Done That.” *Workiva* (blog). April 13, 2022. <https://www.workiva.com/blog/scope-3-10-ks-4-companies-have-been-there-done>.

²⁷⁹ Allbirds, Inc. form 10-K can be found at: <https://www.sec.gov/ix?doc=/Archives/edgar/data/1653909/000165390922000016/bird-20211231.htm>.

²⁸⁰ Etsy, Inc. form 10-K can be found at: <https://www.sec.gov/ix?doc=/Archives/edgar/data/1370637/000137063722000024/etsy-20211231.htm>.

²⁸¹ United Airlines form 10-K can be found at: <https://www.sec.gov/ix?doc=/Archives/edgar/data/100517/000010051722000009/ual-20211231.htm>.

²⁸² Weyerhaeuser Company form 10-K can be found at: https://www.sec.gov/ix?doc=/Archives/edgar/data/106535/000156459022005707/wy-10k_20211231.htm.

In an overview of its signatories' work on Scope 3 emissions, CDP highlights Cisco, a founding CDP Supply Chain member:

Cisco is committed to move their suppliers from simply disclosing to taking action. It embeds KPIs into the supplier management process that align with Cisco's net-zero goal. Cisco also expects suppliers to set emissions reduction targets and meet Cisco's disclosure and data quality standards, including third-party verification of Scope 1 and Scope 2 emissions.²⁸³

In a February 2022 letter to the Commission, renewable energy developer Orsted also expressed support for SEC-mandated Scope 3 disclosures, providing the following description of its own Scope 3 data collection and reporting process:

The next frontier of our emissions reductions is the supply chain (Scope 3). By mapping out and accounting our Scope 3 emissions, we identify what decarbonization actions are needed to reach our net-zero by 2040 commitment. This helped us build out our supply chain decarbonization program, engage suppliers, and develop actions towards net-zero targets.

We began this process by mapping upstream (procurement, SAP) and downstream (products sold) emissions in Scope 3, using GHG Protocol guidance. This originally relied on a combination of actual data already reported as part of the existing ESG reporting, estimates and varying levels of data quality for direct spend and fuels at power stations, and renewable energy supply chain through LCA data and volumes, and estimates on indirect spend.

To stand up Scope 3 reporting infrastructure, we estimate that the preliminary investment was about 650+ hours of development cost.²⁸⁴

In a December 2021 letter to the Commission, PCAF describes its research on Scope 3 costs incurred by its signatory companies, essentially concluding that these costs were very manageable:

The PCAF Secretariat has conducted a brief survey among financial institutions committed to PCAF in order to understand the costs and efforts needed to measure and

²⁸³ Cummings, Andrew. 2022. "4 Steps for Reducing Scope 3 Emissions and Accelerating Action through Your Supply Chain." *CDP* (blog). February 16, 2022. <https://www.cdp.net/en/articles/supply-chain/4-steps-for-reducing-scope-3-emissions-and-accelerating-action-through-your-supply-chain>.

²⁸⁴ Frangione, Kathleen. 2022. Letter to the Securities and Exchange Commission Re: Request for Public Comment on Climate Disclosure Proposed Rule, February 3, 2022. Orsted. <https://www.sec.gov/comments/climate-disclosure/cl112-20115429-267467.pdf>.

disclose the GHG emissions related to their portfolio (so called Scope 3 emissions or financed emissions). In total, 18 PCAF signatories responded to this survey. The survey was only sent to institutions that had already completed at least one full disclosure cycle.

The survey found that typical staff time ranged between 50 and 100 days and external costs are low (<20k USD). Asset size of the respondents varies from less than a \$1bn USD to up to \$500bn USD. The average assets covered by this disclosure activity was in \$5-20bn USD category.²⁸⁵

While cautioning that Scope 3 emissions disclosures to date have been difficult for many companies to calculate accurately, Bank of America expressed support for phasing in SEC-mandated disclosures.²⁸⁶

In an April 2022 Law 360 article, energy and infrastructure attorney Mona Dajani likewise expressed support for Scope 3 disclosure, emphasizing the benefits to registrants. “Mandated disclosure of Scopes 1-3 not only levels the field for investors but also brings certainty and less risk for companies trying to navigate the complicated ins and outs of data gathering and reporting.”²⁸⁷

Similarly, in an April 2022 Reuters Commentary, three Morgan Lewis attorneys representing investment companies and public companies stated that if fully disclosed, Scope 3 information would “provide even deeper insights beyond the public company and into the overall functioning of markets, sectors, and potentially individual market participants.”²⁸⁸

The Commission’s concerns about availability of Scope 3 data are best addressed with a phased-in mandate for small reporting companies and a flexible reporting standard.

Scope 3 emissions data will become increasingly accurate and less costly to collect and analyze over time. The Commission need not make Scope 3 disclosures discretionary based on the registrant’s materiality determination, which will lead to underreporting and lessen the benefits of the Proposal. A better way to address data availability concerns is to put in place a mandatory Scope 3 disclosure rule that will create demand for this information, spurring requests and

²⁸⁵ Partnership for Carbon Accounting Financials (PCAF) Secretariat. 2021. Letter to Interested Parties: Costs and Efforts of GHG Accounting for Financial Institutions, December 21, 2021.

<https://www.sec.gov/comments/climate-disclosure/cl112-20111746-265069.pdf>.

²⁸⁶ Marshall, Elizabeth Dilts. 2022. “Bank of America: SEC ‘Heading in Right Direction’ on Climate Risk Rule.” *Reuters*, April 8, 2022.

<https://www.reuters.com/business/finance/bank-america-backs-sec-proposal-climate-risk-disclosures-2022-04-08/>.

²⁸⁷ Dajani, Mona. 2022. “Supply Chain Info Will Strengthen SEC’s Climate Rule.” *Law 360*, April 20, 2022. <https://www.law360.com/articles/1484923>.

²⁸⁸ Dial, Lance, Erin Martin, and Kirstin Gibbs. 2022. “SEC Proposes a Change in Disclosure Climate.” *Reuters*, April 7, 2022. <https://www.reuters.com/legal/legalindustry/sec-proposes-change-disclosure-climate-2022-04-07/>.

investigation from companies toward their suppliers, customers, and other data providers. Any time lags in gathering data can be addressed with relaxed timelines for small reporting companies and appropriate data estimations by all companies.

The proposed rule provides a very long phase-in for Scope 3 disclosures for those registrants with Scope 3 targets and those determining that their Scope 3 emissions are material. The Commission should abandon this relaxed approach for most filers and instead apply a single timeline for all emissions disclosures, as discussed in the response to question 197. An extended timeline for small reporting companies will delay disclosure requirements until costs fall and competencies rise.

Given the many Scope 3 disclosures already underway, a wide variety of tools are already in place to help companies tackle challenges regarding data quality and lack of transparency in supply chains. Absolute precision is not essential; investors simply need to understand the significant climate risks in the value chain and how companies are managing those risks, with a description of the process followed to address data uncertainties. The responses to questions 96 and 125 include recommendations for how the Commission can guide the use of data inputs, estimates, and assumptions to make Scope 3 disclosures feasible and cost-effective.

101. Should we require a registrant to exclude any use of purchased or generated offsets when disclosing its Scope 1, Scope 2, and Scope 3 emissions, as proposed? Should we require a registrant to disclose both a total amount with, and a total amount without, the use of offsets for each scope of emissions?

The Commission should require registrants to exclude any use of purchased or generated offsets and RECs when disclosing their Scope 1, Scope 2, and Scope 3 emissions, as proposed.

Registrants should not be permitted to include the use of offsets and RECs in reporting emissions because gross emissions are a better indicator of transition risk. As discussed in the response to Question 24, there are major integrity problems within the carbon offset markets that should preclude their usage to offset gross emissions. Reporting offsets from total emissions separately is crucial for investors to gain a full picture of a registrant's overall emissions profile, and to ascertain the alignment of that emissions profile with any climate targets, goals, or strategies. Further, as part of accounting for purchased offsets, total offset credits must be demonstrably retired as a condition of a physical delivery under a verified carbon standard. Given that leading private standard setters²⁸⁹ already have such a separate reporting requirement, the SEC's proposal

²⁸⁹ Partnership for Carbon Accounting Financials (PCAF). 2022. "Public Consultation Open from 10 November to 17 December." Accessed June 10, 2022. <https://carbonaccountingfinancials.com/public-consultation>; Greenhouse Gas Protocol. N.d. "Corporate Standard." Accessed June 10, 2022. <https://ghgprotocol.org/corporate-standard>.

will not unduly burden companies in complying. Further, if an investor is interested in the ‘net’ value (i.e. total emissions minus offsets), such a calculation is easily accomplished by combining the separately reported data, whereas permitting registrants to report only a net value would restrict the full set of information available to investors who want to use gross emissions separately from offset emissions as inputs to their investment decisions and engagement.

The SEC should not require a registrant to disclose a total net amount with the use of offsets. As stated above, should an investor choose to utilize a net value, separately reporting total emissions and offsets will allow for this calculation to be made at an investor’s discretion, with no need for registrants to report any further values. If registrants choose to present data on purchases of offsets and RECs, these data should be in a separate area of the 10-K or in a note, should be clearly marked as including offsets or RECs, and should refer to the registrants’ description of the use of offsets and RECs elsewhere in the 10-K.

102. Should we require a registrant to disclose its Scope 3 emissions for each separate significant category of upstream and downstream emissions as well as a total amount of Scope 3 emissions for the fiscal year, as proposed? Should we only require the disclosure of the total amount of Scope 3 emissions for the fiscal year? Should we require the separate disclosure of Scope 3 emissions only for certain categories of emissions and, if so, for which categories?

The Commission should require Scope 3 emissions to be separately disclosed for each category of upstream and downstream emissions as well as a total amount of Scope 3 emissions for the fiscal year. The Commission should eliminate the ability for registrants to avoid disclosures by declaring certain categories insignificant.

The Commission should require, in Subsection (c)(1) of § 229.1504 (Item 1504 - GHG emissions metrics), that a registrant identify the categories of upstream or downstream activities that have been included in the calculation of the Scope 3 emissions. However, the Commission should not, as proposed, allow registrants to avoid reporting on emissions from certain categories by declaring those emissions to be insignificant. As noted above, Scope 3 disclosures are valuable to investors because they help them identify sources of transition risk as well as opportunities to reduce such risk through decarbonization at key junctures in the value chain. Each Scope 3 category points to different sources of risk and opportunity. Identifying those risks and opportunities is much more feasible if registrants are required to disclose all Scope 3 emissions by category.

Allowing the registrant to decide which categories of emissions are significant creates unnecessary confusion, given the absence of any standards governing which Scope 3 emissions are significant. The GHG Protocol, for instance, has no “significance” determination. The

Commission should simplify this determination by requiring disclosures of Scope 3 emissions in each category.

103. Should the proposed rules include a different standard for requiring identification of the categories of upstream and downstream emissions, such as if those categories of emissions are significant to total GHG emissions or total Scope 3 emissions? Are there any other categories of, or ways to categorize, upstream or downstream emissions that a registrant should consider as a source of Scope 3 emissions? For example, should we require a registrant to disclose Scope 3 emissions only for categories of upstream or downstream activities over which it has influence or indirect control, or for which it can quantify emissions with reasonable reliability? Are there any proposed categories of upstream or downstream emissions that we should exclude as sources of Scope 3 emissions?

As noted in the response to question 102, the Commission should require Scope 3 emissions to be disclosed by category, without regard to whether the registrant considers emissions in any category to be significant.

The Commission has proposed appropriate categories of Scope 3 emissions disclosures. It should not authorize registrants to avoid such disclosures based on subjective determinations of whether certain upstream or downstream activities are beyond their “control.”

The main purpose for including GHG emissions disclosure, including Scope 3 emissions, in annual reporting, is to give investors information about the transition risk to the registrant. Whether a registrant has control over Scope 3 emissions is relevant to the strategies they can employ for addressing that risk, but a lack of control does not eliminate the risk. Indeed, where registrants have less control over their Scope 3 emissions, that may pose a higher level of risk because mitigation would be more difficult. If a registrant truly does not have any control over emissions from its products, Scope 3 emissions would represent a significant transition risk and would be decision-useful information for investors. This need for disclosure is particularly high where those emissions may affect financial estimates and assumptions, such as the long-term value of assets that require high emissions inputs or that rely on the continued willingness of customers to consume high-emissions products.

For all of these reasons, all proposed categories of upstream or downstream emissions should be included as sources of Scope 3 emissions that must be disclosed, regardless of the registrant’s views of influence or control over those emissions.

104. Should we, as proposed, allow a registrant to provide their own categories of upstream or downstream activities? Are there additional categories, other than the examples we have identified, that may be significant to a registrant’s Scope 3 emissions and that should be listed in the proposed rule? Are there any categories that we should preclude, e.g., because of lack of accepted methodologies or availability of data? Would it be useful to allow registrants to add categories that are particularly significant to them or their industry, such as Scope 3 emissions from land use change, which is not currently included in the Greenhouse Gas Protocol’s Scope 3 categories? Should we specifically add an upstream emissions disclosure category for land use?

Registrants should not be allowed to provide additional categories of upstream or downstream activities within their Scope 3 disclosures beyond the 15 identified in the Proposal. However, the Commission should add a subcategory under each major category to ensure that emissions from land use are reported alongside (and separately from) other GHG emissions.

Registrants should not be allowed to provide additional categories of upstream or downstream activities within their Scope 3 disclosures beyond those provided by the Commission, which align with the 15 categories in the near universally accepted Greenhouse Gas Protocol. Allowing registrants to provide ad hoc emissions categories would frustrate the standardization and comparability benefits of mandatory disclosure.

However, the Commission should create a subcategory within each of the 15 Scope 3 categories to capture all of the land use-related emissions that are the focus of the GHG Protocol’s Land Sector and Removals Initiative.²⁹⁰ This subcategory should include:

- Carbon emissions from land use (e.g., forest management, crop and livestock production, bioenergy feedstock production, soil carbon, etc.)
- Carbon emissions from land use change (e.g., deforestation, afforestation, wetland conversion, etc.)
- Agricultural GHG emissions (e.g., livestock methane emissions, soil nitrous oxide emissions, etc.)
- Biogenic carbon dioxide emissions from bioenergy production and consumption (e.g., biomass, biofuels, biogas)

Agriculture, forestry, and other land use contribute roughly one-fourth of global anthropogenic GHG emissions.²⁹¹ Yet given the complexity of calculating these emissions, which requires assessment of the balance between emissions and uptake, investors have a particular need for

²⁹⁰ Greenhouse Gas Protocol. 2022. “Land Sector and Removals Initiative: Project Overview.” Greenhouse Gas Protocol, May 3, 2022. https://ghgprotocol.org/sites/default/files/standards/LSR_Overview.pdf.

²⁹¹ United Nations Climate Change. 2022. “Introduction to Land Use.” Accessed June 10, 2022. <https://unfccc.int/topics/land-use/the-big-picture/introduction-to-land-use>.

transparency about this subset. Fortunately, the GHG Protocol is in the process of developing a calculation methodology, with publication due in early 2023.²⁹² Registrants and investors would benefit from GHG Protocol’s methodological work if the Commission were to add a land use subcategory.

An April 2022 analysis by Mighty Earth highlighted the need for disclosure of emissions from land use. Mighty Earth investigated the emissions of meatpacking giant JBS and found that recent pledges by JBS to reduce its GHG emissions by 2030 excluded Scope 3 emissions from livestock and animal feed that it sources, as well as the associated emissions from forest clearances and fires, land conversion, enteric fermentation, and farming fuel and agrochemicals used in its supply chains. These Scope 3 emissions represent 97 percent of JBS’s total emissions inventory, and thus its failure to disclose them in a meaningful format left its investors in the dark about its transition risk. Mighty Earth reports that it tried and failed to obtain precise numbers from JBS about these emissions and thus was forced to use conservative estimates.²⁹³

105. Should we require the calculation of a registrant’s Scope 1, Scope 2, and/or Scope 3 emissions to be as of its fiscal year end, as proposed? Should we instead allow a registrant to provide its GHG emissions disclosures according to a different timeline than the timeline for its Exchange Act annual report? If so, what should that timeline be? For example, should we allow a registrant to calculate its Scope 1, Scope 2, and/or Scope 3 emissions for a 12-month period ending on the latest practicable date in its fiscal year that is no earlier than three months or, alternatively, six months prior to the end of its fiscal year? Would allowing for an earlier calculation date alleviate burdens on a registrant without compromising the value of the disclosure? Should we allow such an earlier calculation date only for a registrant’s Scope 3 emissions? Would the fiscal year end calculations required for a registrant to determine if Scope 3 emissions are material eliminate the benefits of an earlier calculation date? Should we instead require a registrant to provide its GHG emissions disclosures for its most recently completed fiscal year one, two, or three months after the due date for its Exchange Act annual report in an amendment to that report?

If it would alleviate burdens, registrants should be allowed to provide GHG emissions disclosure according to a different timeline from the timeline for its Exchange Act annual report, as long as the disclosure covers a 12-month period ending on the latest practicable date in its fiscal year that is no earlier than six months prior to the end of its fiscal year.

²⁹² Greenhouse Gas Protocol. 2021. “Update on Greenhouse Gas Protocol Carbon Removals and Land Sector Initiative.” Announcement, July 8, 2021.

<https://ghgprotocol.org/blog/update-greenhouse-gas-protocol-carbon-removals-and-land-sector-initiative>.

²⁹³ Herrmann, Michaela. 2022. “Brazilian Meat Giant JBS a Bigger Emitter Than Italy, Study Estimates.” *DeSmog*, April 21, 2022.

<https://www.desmog.com/2022/04/21/brazilian-meat-giant-jbs-a-bigger-emitter-than-italy-study-estimates/>.

Additionally, a registrant should be required to use the same end date each year for its annual emissions reporting cycle and this information must be clearly disclosed in the 10-K for that fiscal year. For example, if a large accelerated filer determines that the last practicable day for FY2024 GHG emissions reporting is November 13, 2024, it would be required to disclose its emissions covering November 14, 2023 through November 13, 2024 in its FY2024 10-K due 90 days after the end of the 2024 fiscal year, including clear disclosure of this discrepancy.

GHG emissions disclosure should not be allowed to be made one, two, or three months after the due date for a registrants' Exchange Act annual report in an amendment to that report because 1) 10-K amendments could render the data less practically accessible; 2) investors will be left in the dark for the intervening time period, diminishing the benefits of timely, comparable disclosure; and 3) GHG emissions are an important component of financial reporting and an input to the consolidated financial statements, so requiring financial reporting without first establishing GHG emissions would be counter to the overarching goals of this Proposal and diminish the benefits to users.

While the SEC's EDGAR system²⁹⁴ does serve as a comprehensive repository of 10-K and 10-K/A forms, additional investigatory burden and complexity is introduced if registrants choose to disclose their emissions in 10-K/A forms. Registrants might claim that they need multiple 10-K/A's to disclose Scopes 1 and 2 and Scope 3, separately, for example. Further, some investors will seek GHG disclosure data via 10-K forms listed on registrants' own websites, and many registrants fail to update these sites with 10-K/A forms in a timely and comprehensive manner. The alternative mentioned above is the better approach: registrants should be allowed to provide GHG emissions disclosure according to a timeline that is different from the timeline for its Exchange Act annual report as long as the disclosure covers a 12-month period ending on the latest practicable date in its fiscal year that is no earlier than six months prior to the end of its fiscal year.

106. Should we require a registrant that is required to disclose its Scope 3 emissions to describe the data sources used to calculate the Scope 3 emissions, as proposed? Should we require the proposed description to include the use of: (i) emissions reported by parties in the registrant's value chain, and whether such reports were verified or unverified; (ii) data concerning specific activities, as reported by parties in the registrant's value chain; and (iii) data derived from economic studies, published databases, government statistics, industry associations, or other third-party sources outside of a registrant's value chain, including industry averages of emissions, activities, or economic data, as proposed? Are there other

²⁹⁴ Securities and Exchange Commission (SEC). n.d. "EDGAR: Company Filings." Accessed June 10, 2022. <https://www.sec.gov/edgar/searchedgar/companysearch.html>.

sources of data for Scope 3 emissions the use of which we should specifically require to be disclosed? For purposes of our disclosure requirement, should we exclude or prohibit the use of any of the proposed specified data sources when calculating Scope 3 emissions and, if so, which ones?

The Commission should require registrants to disclose the data sources used to calculate Scope 3 emissions, as proposed, including (i) emissions reported by parties in the registrant’s value chain, and whether such reports were verified or unverified; (ii) data concerning specific activities, as reported by parties in the registrant’s value chain; and (iii) data derived from economic studies, published databases, government statistics, industry associations, or other third-party sources outside of a registrant’s value chain, including industry averages of emissions, activities, or economic data.

Disclosure of the data sources that underlie GHG emissions calculations and reporting is critical in generating decision-useful, accurate, and comparable information for investors and auditors. The SEC should require such disclosure, but weighing in on the particular credibility, or lack thereof, for all possible individual types of data or data repositories is a difficult and complex task. Rather than crafting rule language on data credibility, the SEC should provide guidance regarding the data sources that are preferred and encourage registrants to follow emerging market best practices. Most important, the final rule should require attestation by an independent provider to ensure the credibility of the registrant’s choices regarding data sources, methodology, and boundary setting for Scopes 1, 2, and 3 emissions reporting.

SEC guidance should encourage the use of actual, measured data from counterparties wherever possible, followed by data derived in part from U.S. government or internationally recognized databases, and finally by credible economic studies. Data from industry-led initiatives and associations should only be used where other data sources are unavailable, and it’s critical that these choices be subject to thorough scrutiny through the assurance process. Because much of the data for Scope 3 calculations will come from sources external to the registrant, it is absolutely critical that an independent attestation provider checks the credibility and accuracy of these disclosures.

107. Should we require a registrant to provide location data for its disclosed sources of Scope 1, Scope 2, and Scope 3 emissions if feasible? If so, should the feasibility of providing location data depend on whether it is known or reasonably available pursuant to the Commission’s existing rules (Securities Act Rule 409 and Exchange Act Rule 12b-21)? Would requiring location data, to the extent feasible, assist investors in understanding climate-related risks, and in particular, likely physical risks, associated with a registrant’s emissions’ sources? Would a

requirement to disclose such location data be duplicative of any of the other disclosure requirements that we are proposing?

The Commission should require registrants to provide location data for disclosed sources of Scopes 1, 2, and 3 emissions over 25,000 metric tons CO₂e²⁹⁵ annually wherever it is feasible (i.e., known or reasonably available according to Securities Act Rule 409 and Exchange Act Rule 12b-21).

GHG emissions location disclosure will help investors assess variable physical and transition risks specific to a location or jurisdiction from climate impacts, climate-related regulation, or trade, geopolitical, or preference changes by consumer or other market participants. Two registrants with the same level of Scope 1 emissions that operate facilities in different localities may face different degrees of risk. Regulatory (and effective) carbon prices vary widely around the world,²⁹⁶ and emissions-intensive assets and operations in one country, state, or locale may face more or less transition risk than those in others. If investors don't have access to location information for large emissions sources, their ability to determine transition risk accurately and make comparisons between companies with similar gross emissions figures will be constrained. Further, disclosure of this information would incur minimal cost, as it is already known by the registrant.

Location of GHG emissions is an important component of establishing levels of both transition and physical risks. Because GHG emissions are nearly always released along with criteria pollutants, and many of them are themselves criteria pollutants, there is additional transition risk for GHG-emitting facilities that are near population centers, and location tagging will help investors analyze those enhanced risks. For example, a natural gas power plant located in an area increasingly vulnerable to climate-related weather events could be damaged in a storm and release fugitive methane emissions that augment transition risk for the registrant due to regulatory penalties, litigation, or shareholder or community-led action.

The presence of public health harms (particularly air quality concerns) and active social movements to address those concerns where climate policies are under consideration can be an important factor in building the political will to pass and implement those policies, heightening transition risk. For example, when toxic smog provoked widespread protests in Beijing in 2013, the government began an ambitious effort to reduce emissions from coal-based industry and home heating, resulting in GHG emissions reductions and improvements in air quality much

²⁹⁵ 25,000 metric tons is the criteria used to establish "large GHG emissions sources" requiring disclosure under the EPA's greenhouse gas reporting program for large facilities and suppliers (Environmental Protection Agency (EPA). 2021. "Learn About the Greenhouse Gas Reporting Program (GHGRP)." Greenhouse Gas Reporting Program (GHGRP). Updated October 6, 2021.

[https://www.epa.gov/ghgreporting/learn-about-greenhouse-gas-reporting-program-ghgrp.](https://www.epa.gov/ghgreporting/learn-about-greenhouse-gas-reporting-program-ghgrp))

²⁹⁶ The World Bank. 2022. "Carbon Pricing Dashboard." Data. Accessed June 10, 2022.
https://carbonpricingdashboard.worldbank.org/map_data.

faster than expected.⁸⁸ Public health harms from criteria pollutants are especially concentrated in communities of color and low-income communities, causing convoluted transition risks from climate change, and racial and economic inequality that spurs support for transition, as discussed in our response to question 9. Provision of location data for disclosed sources of Scope 1, 2, and 3 emissions will enable investors to identify where policy risks are heightened due to the presence of public health concerns.

A 25,000 metric ton limit is appropriate because the EPA has recognized this threshold as qualification for “large” sources of emissions, and such facilities account for about 85 to 90 percent of overall U.S. emissions, thus capturing the majority of the transition risk within the market for at least U.S.-based emissions. Further, using the EPA threshold will minimize disclosure costs and obviate any confusion regarding qualifying sources.

108. If we require a registrant to provide location data for its GHG emissions, how should that data be presented? Should the emissions data be grouped by zip code separately for each scope? Should the disclosure be presented in a cartographic data display, such as what is commonly known as a “heat map”? If we require a registrant to provide location data for its GHG emissions, should we also require additional disclosure about the source of the emissions?

In addition to aggregate GHG emissions disclosure, these figures should be disaggregated by location and location data should be presented using the U.S. zip code and/or country for the location of any known and disclosed point source or land area, separately for each scope.

Presentation of data in a “heat map” would be useful particularly in identifying the overlap with emissions of other toxic pollution, perhaps in tandem with resources like the EPA’s EJScreen,²⁹⁷ to identify community-level impacts on poor communities and communities of color and attendant transition risks. See the response to question 107.

109. Should we require a registrant to disclose the intensity of its GHG emissions for the fiscal year, with separate calculations for (i) the sum of Scope 1 and Scope 2 emissions and, if applicable (ii) its Scope 3 emissions (separately from Scopes 1 and 2), as proposed? Should we define GHG intensity, as proposed? Is there a different definition we should use for this purpose?

²⁹⁷ Environmental Protection Agency (EPA). 2022. “EJScreen: Environmental Justice Screening and Mapping Tool.” Updated April 1, 2022. <https://www.epa.gov/ejscreen>.

The Commission should require registrants to disclose the intensity of their GHG emissions for the fiscal year, with separate calculations for the sum of Scope 1 and 2 emissions and Scope 3 emissions, as proposed. GHG intensity is appropriately defined in the Proposal.

For GHG emissions intensity, in contrast to gross GHG emissions, it is appropriate to sum Scopes 1 and 2 emissions because this gives a holistic, comparable indication of the emissions intensiveness per product unit based on the registrant's operations. Consider a case in which registrant A generates energy on site to power their manufacturing process, while registrant B purchases electricity from a utility provider to power their manufacturing. These two registrants will have different ratios of gross Scope 1 and Scope 2 emissions, and this reflects different risks and opportunities to mitigate transition risk, so this information is informative to investors. Still, investors may find it useful to know which registrant's overall business model is more emissions intensive per unit of product sold. In this case, summing Scopes 1 and 2 in the numerator will allow them to compare two or more registrants whose businesses are structured differently, or who are differently sized.

Emissions intensity should be separately reported for Scope 3 emissions. In their June 2021 research paper, Jaller and Matthews show why emissions intensity data are critical for evaluating the efficiency of a company in its use of resources, whether changes in total emissions are due to positive or negative economic growth and what investments may be needed to decarbonize.²⁹⁸ Investors evaluating a company's approach to managing its transition risk therefore need its Scope 3 emissions intensity data as well as gross emissions data.

110. Should we require the disclosed GHG intensity to be expressed in terms of metric tons of CO₂e per unit of total revenue, as proposed? Should we require a different financial measure of GHG intensity and, if so, which measure? For example, should GHG intensity be expressed in terms of metric tons of CO₂e per unit of total assets?

GHG intensity should be expressed in terms of metric tons of CO₂e per unit of total revenue, or if the registrant has no annual revenue, in terms of metric tons of CO₂e per unit of total operating expenses, with a clear note indicating that this is an alternative metric.

111. Should we require the disclosed GHG intensity to be expressed in terms of metric tons of CO₂e per unit of production, as proposed? Would such a requirement facilitate the comparability of the disclosure? Should we require a different economic output measure of

²⁹⁸ Jaller, Miguel, and Scott Matthews. 2021. "Can Carbon Intensity Metrics Help Achieve Net Carbon Reductions?" UC Davis white paper, June 2021. <https://faculty.engineering.ucdavis.edu/jaller/wp-content/uploads/sites/298/2021/06/92021-Jaller-and-Matthews-Can-Carbon-Intensity-Metrics-Help-Achieve-Net-Carbon-Reductions.pdf>.

GHG intensity and, if so, which measure? For example, should GHG intensity be expressed in terms of metric tons of CO₂e per number of employees? Should we require the GHG intensity to be expressed per unit of production relevant to the registrant’s business (rather than its industry)? Is further guidance needed on how to comply with the proposed requirement? Would requiring GHG intensity to be expressed in terms of metrics tons of CO₂e per unit of production require disclosure of commercially sensitive or competitively harmful information?

GHG intensity should be expressed in terms of metric tons of CO₂e per unit of production, as proposed.

This would facilitate comparability of the disclosure, and registrants should be encouraged to select a unit of production relevant to the registrant’s industry where possible to facilitate comparisons, along with an explanation of why the particular unit of production was chosen.

Should a pattern of differing metrics frustrate comparison, the SEC could provide further guidance through ongoing engagement, enforcement, SABs, or updates to the industry guides to standardize the metrics chosen for certain industries.

GHG intensity metrics at the company-wide level do not represent commercially sensitive or competitively harmful information, as evidenced by the many companies that voluntarily disclose this information today. Additionally, GHG intensity metrics are important to asset valuation and they are calculated from two other metrics that are critical inputs to financial reporting—GHG emissions and units of production²⁹⁹—that are both already likely to be disclosed. This precludes registrants from redacting due to commercial sensitivity, an option that is only allowed when the information is not material to investors.³⁰⁰

112. Should we require a registrant with no revenue or unit of production for a fiscal year to disclose its GHG intensity based on, respectively, another financial measure or measure of economic output, as proposed? Should we require such a registrant to use a particular financial measure, such as total assets, or a particular measure of economic output, such as total number of employees? For registrants who may have minimal revenue, would the proposed calculation result in intensity disclosure that is confusing or not material? Should additional guidance be provided with respect to such instances?

²⁹⁹ Financial Accounting Standards Board (FASB). 2015. “Simplifying the Measurement of Inventory.” FASB, July 2015. <https://asc.fasb.org/imageRoot/22/66710722.pdf>.

³⁰⁰ Breheny, Brian V., Andrew J. Brady, Ryan J. Adams, Caroline S. Kim, Jeongu Gim, and Blake M. Grady. 2020. “Guide to Maintaining Confidentiality of Commercially Sensitive Information in Agreements Filed with SEC.” Skadden, Arps, Slate, Meagher & Floam LLP, September 22, 2020. <https://www.skadden.com/insights/publications/2020/09/guide-to-maintaining-the-confidentiality>.

Registrants with no revenue or unit of production for a fiscal year should be required to disclose GHG intensity based on another financial measure, as proposed.

Registrants with less than \$10 million in revenue for a fiscal year should also be allowed to substitute into their disclosures an alternative metric like emissions per operating expenses, along with justification for why emissions per revenue would be less meaningful.

113. Should we permit a registrant to disclose other measures of GHG intensity, in addition to the required measures, as long as the registrant explains why it uses the particular measure of GHG intensity and discloses the corresponding calculation methodology used, as proposed?

Registrants should be allowed to disclose alternative measures of GHG intensity, in addition to required measures, in a note as long as the registrant explains why it uses the particular measure of GHG intensity and discloses the corresponding calculation methodology used.

Emissions data will be most useful to investors if they are easy to find and compare, so additional optional metrics must be clearly demarcated from required metrics.

114. Should we require GHG emissions disclosure for the registrant's most recently completed fiscal year and for the appropriate, corresponding historical fiscal years included in the registrant's consolidated financial statements in the filing, to the extent such historical GHG emissions data is reasonably available, as proposed? Should we instead only require GHG emissions metrics for the most recently completed fiscal year presented in the relevant filing? Would requiring historical GHG emissions metrics provide important or material information to investors, such as information allowing them to analyze trends?

Registrants should disclose emissions data for their recently completed fiscal year and for the appropriate, corresponding historical fiscal years included in the registrant's consolidated financial statements in the filing, to the extent such historical GHG emissions data are reasonably available, as proposed.

This is important because GHG emissions are a critical input for understanding the assumptions and estimates underlying the consolidated financial statements, as discussed in responses to questions 1 and 90, and because historical emissions will help investors analyze trends and track registrants' progress against transition plans.

115. Should we require a registrant to disclose the methodology, significant inputs, and significant assumptions used to calculate its GHG emissions metrics, as proposed? Should we require a registrant to use a particular methodology for determining its GHG emission metrics? If so, should the required methodology be pursuant to the GHG Protocol’s Corporate Accounting and Reporting Standard and related standards and guidance? Is there another methodology that we should require a registrant to follow when determining its GHG emissions? Should we base our climate disclosure rules on certain concepts developed by the GHG Protocol without requiring a registrant to follow the GHG Protocol in all respects, as proposed? Would this provide flexibility for registrants to choose certain methods and approaches in connection with GHG emissions determination that meet the particular circumstances of their industry or business or that emerge along with developments in GHG emissions methodology as long as they are transparent about the methods and underlying assumptions used? Are there adjustments that should be made to the proposed methodology disclosure requirements that would provide flexibility for registrants while providing sufficient comparability for investors?

The Commission should require the incorporation of the GHG Protocol’s concept of GHG emission scopes and related disclosure methodology, significant inputs, and significant assumptions, as proposed.

The GHG Protocol’s Corporate Accounting and Reporting Standard is by far the most widely used global GHG accounting standard, and its concepts and vocabulary are widely understood by registrants and investors.³⁰¹

116. Should we require a registrant to disclose the organizational boundaries used to calculate its GHG emissions, as proposed? Should we require a registrant to determine its organizational boundaries using the same scope of entities, operations, assets, and other holdings within its business organization as that used in its consolidated financial statements, as proposed? Would prescribing this method of determining organizational boundaries avoid potential investor confusion about the reporting scope used in determining a registrant’s GHG emissions and the reporting scope used for the financial statement metrics, which are included in the financial statements? Would prescribing this method of determining organizational boundaries result in more robust guidance for registrants and enhanced comparability for investors? If, as proposed, the organizational boundaries must be consistent with the scope of the registrant’s consolidated financial statements, would requiring separate disclosure of the organizational boundaries be redundant or otherwise unnecessary?

³⁰¹ Greenhouse Gas Protocol. N.d. “Companies and Organizations.” Accessed June 10, 2022. <https://ghgprotocol.org/companies-and-organizations>.

It is generally appropriate that a registrant be required to determine organizational boundaries for its GHG emissions using the same scope of entities, operations, assets, and other holdings within its business organization as those included in its consolidated financial statements, as proposed. However, in addition to reporting Scope 1, 2, and 3 emissions for the consolidated accounting group (the parent and its subsidiaries), registrants should also separately disclose Scope 1, 2, and 3 emissions for associates, joint ventures, unconsolidated subsidiaries or affiliates that are not included in the consolidated accounting group, so that investors can understand and compare the total emissions for registrants with different business structures.

The proposed organizational boundary method is based upon the same set of accounting principles applicable to the consolidated financial statement, and requires registrants to reconcile time periods by applying existing GAAP to setting organizational boundaries for GHG emissions disclosure. With a few key exceptions regarding affiliated entities outside the consolidated accounting group (discussed below), this method for organizational boundary setting suits the U.S. financial reporting regime and the needs of investors. In general, this proposed method would enhance comparability and understandability of the corresponding GHG emissions data and financials. Further, a consistent organizational boundary would help investors understand GHG emissions disclosure within the context of financial reporting, especially if the Commission adopts the recommendation that this disclosure be included in Regulation S-X, as discussed in responses to questions 1 and 90. Any deviations from the proposed organizational boundary approach must be disclosed along with the rationale, and analyzed by an independent attestation provider through the assurance process.

In addition, because various registrants take different approaches to consolidation that may not reflect their entire emissions portfolio and associated level of transition risk, the SEC must separately require Scope 1, 2, and 3 emissions disclosure for unconsolidated entities (i.e., associates, joint ventures, and unconsolidated subsidiaries and affiliates) outside of the consolidated accounting group, along with disclosure of the approach used to calculate these values (e.g., the equity share, operational control, or financial control methods) as suggested in the recent draft IFRS Climate Disclosure Standard.³⁰²

For private equity registrants and others whose business models involve taking a substantial controlling interest over and operating portfolio companies that they typically do not consolidate, the Commission should require an equity share GHG accounting approach for unconsolidated entities.

³⁰² International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

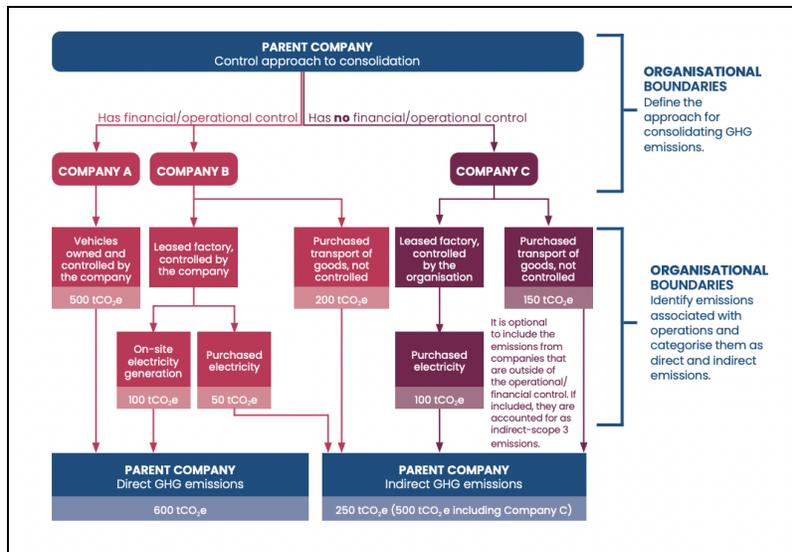
Such an approach is consistent with recent guidance³⁰³ from Initiative Climat International, ERM, UN Principles of Responsible Investment, CDP, and Ceres recommends that private equity firms include Scope 1 and Scope 2 emissions from portfolio companies within their own Scope 1 and 2 emissions, respectively, when the registrant has some level of financial or operational control.

The information to effectively value securities includes the assessments of holdings that may not be otherwise generally consolidated. An accurate depiction of the consolidated enterprise is helpful, but the unconsolidated holdings may, at times, be even more directly impactful. Disaggregation of Scopes 1, 2, and 3 GHG emissions is important information for the accurate valuation of securities, in part, because each of those figures represents different risks to the registrant and are mitigated via different solutions of varying cost, feasibility, and impacts on the issuer and the valuations of any related securities. Permitting a filer to avoid detailed reporting for an unconsolidated affiliate or entity for which it may exercise significant control could lead to significant evasion, as well as the aggregation of hidden risks to investors and markets. As we have seen repeatedly over the years, in times of market stress, holdings that may be held "off balance sheet" or not consolidated in a firm's financials may suddenly be shifted back "on balance sheet" or otherwise consolidated, for commercial, regulatory, or other reasons. The risks associated with these holdings may be material, and could potentially even threaten the viability of the firm.³⁰⁴ SEC should adopt the disclosure guidance of Initiative Climat International (see Figure below³⁰⁵) and require private equity firms to report certain emissions from portfolio companies that are outside the consolidated accounting group but within their operational and financial control in their Scope 1 and Scope 2 inventories, based on the equity share approach.

³⁰³ Initiative Climat International (ICI) and Environmental Resources Management (ERM). *Greenhouse Gas Accounting and Reporting For the Private Equity Sector*. ICI and ERM. <https://www.unpri.org/download?ac=16265>.

³⁰⁴ See E.g., <https://www.troweprice.com/corporate/us/en/press/t--rowe-price-to-compensate-clients-for-dell-voting-error.html>

³⁰⁵ *Ibid.*



Private equity firms are major operators of fossil fuel power plants, and thus have significant transition risk from the emissions of their portfolio companies.³⁰⁶ If the Commission does not adopt the recommendations to require disclosure of two sets of GHG emissions (i.e., for the consolidated financial group and for unconsolidated entities) and to require private equity registrants to use the equity share approach for their GHG inventory of unconsolidated entities, private equity registrants will be incentivized to account for portfolio company emissions in their Scope 3 emissions inventory (as investment emissions) and then make an inaccurate non-materiality determination to avoid disclosing those emissions. If that is the case, private equity registrants would be allowed to omit emissions from facilities over which they exert full financial and/or operational control, and which generate substantial risk, exploiting an unintended loophole within the Proposal.

117. Except for calculating Scope 3 emissions, the proposed rules would not require a registrant to disclose the emissions from investments that are not consolidated, proportionately consolidated, or that do not qualify for the equity method of accounting. Should we require such disclosures for Scopes 1 and 2 emissions, and if so, how?

See response to question 116.

119. Alternatively, should we require registrants to use the organizational boundary approaches recommended by the GHG Protocol (e.g., financial control, operational control, or

³⁰⁶ Americans for Financial Reform Education Fund (AFR EF) and Public Citizen. 2022. “Results of a Nationwide Survey: Retail Investors’ Support for the SEC Mandating Climate-Related Financial Disclosures from Public Companies.” AFREF and Public Citizen, April 28, 2022. https://ourfinancialsecurity.org/wp-content/uploads/2022/04/FINAL-Report_Climate-Disclosure-Survey-Results_AFR-PC-2.pdf.

equity share)? Do those approaches provide a clear enough framework for complying with the proposed rules? Would such an approach cause confusion when analyzing information in the context of the consolidated financial statements or diminish comparability? If we permit a registrant to choose one of the three organizational boundary approaches recommended by the GHG Protocol, should we require a reconciliation with the scope of the rest of the registrant’s financial reporting to make the disclosure more comparable?

The Commission should not allow registrants to select an organizational boundary approach as this will decrease the comparability of the resultant disclosures. The Commission should adopt the approaches outlined in the response to question 116. If the SEC declines to follow the recommendation and permits a registrant to choose one of the three organizational boundary approaches recommended by GHG Protocol, it should also require a reconciliation with the scope of the rest of the registrant’s financial reporting to make the disclosure more comparable.

The response to question 116 calls for the Commission to adopt a standardized approach to organizational boundaries. If the Commission instead allows registrants to select from the GHG Protocol approaches, in the cases where reconciliation is needed, the Commission should also require the registrant to clearly describe why it was infeasible to set the organizational boundary for their GHG emissions disclosure according to the recommendations in response to question 116. GHG emissions data are a critical input for understanding a registrant’s financial estimates and assumptions, so a consistent organizational boundary approach is the most appropriate and will improve the quality, comparability, and value of financial reporting generally.

For the calculation and disclosure of the additional metrics discussed in response to question 116—the disclosure of the Scope 1, 2, and 3 emissions for unconsolidated entities (i.e., associates, joint ventures, unconsolidated subsidiaries or affiliates)—it is appropriate to allow registrants to select from the three GHG Protocol approaches (e.g., the equity share, operational, or financial control methods) as long as the registrant discloses the method used, as suggested in the recent draft IFRS standard,³⁰⁷ with the exception of private equity registrants who should be required to use an equity share approach, as outlined in the response to question 116.

120. Should we require a registrant to disclose its operational boundaries, as proposed? Should we require a registrant to discuss its approach towards the categorization of emissions (e.g., as direct or indirect emissions) and emissions sources (e.g., stationary or mobile) when describing its operational boundaries, as proposed?

³⁰⁷ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. London: IFRS Foundation.
<https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

Registrants should be required to disclose their operational boundaries and to discuss their approach toward the categorization of emissions and emissions sources, as proposed.

122. Should we require a registrant to use the same organizational boundaries when calculating its Scopes 1 and 2 emissions, as proposed? Are there any circumstances when a registrant’s organizational boundaries for determining its Scope 2 emissions should differ from those required for determining its Scope 1 emissions? Should we also require a registrant to apply the same organizational boundaries used when determining its Scopes 1 and 2 emissions as an initial step in identifying the sources of indirect emissions from activities in its value chain over which it lacks ownership and control and which must be included in the calculation of its Scope 3 emissions, as proposed? Are there any circumstances where using a different organizational boundary for purposes of Scope 3 emissions disclosure would be appropriate?

The Commission should require registrants to use the same organizational boundaries when calculating their Scopes 1 and 2 emissions, and apply that as an initial step in identifying sources of indirect emissions from activities in their value chain over which they lack ownership and control and which must be included in the calculation of their Scope 3 emissions, as proposed.

Organizational boundaries should be consistent for the accounting of Scopes 1, 2, and 3 emissions because GHG emissions—including all three Scopes—are a critical input for understanding a registrant’s financial estimates and assumptions and applying a consistent organizational boundary will improve the quality and comparability of the financial reporting data.

123. Should we require a registrant to be consistent in its use of its organizational and operational boundaries once it has set those boundaries, as proposed? Would the proposed requirement help investors to track and compare the registrant’s GHG emissions over time?

The Commission should require registrants to be consistent in their approach to determining organizational and operational boundaries once they have established their approach, as proposed.

This will help investors track and compare registrants’ GHG emissions over time. Registrants should be required to describe their approach to categorizing their emissions and emissions sources when describing their operational boundaries, as well as any major changes that occur year to year due to business restructuring.

124. Should we require a registrant to disclose the methodology for calculating the GHG emissions, including any emission factors used and the source of the emission factors, as proposed? Should we require a registrant to use a particular set of emission factors, such as those provided by the EPA or the GHG Protocol?

The Commission should require registrants to disclose the methodology used for calculating the GHG emissions, including any emission factors used and the source of the emissions factors, as proposed.

The most accurate data will derive from direct measurement of GHG emissions from a source, but registrants should also be allowed to calculate emissions using emission factors multiplied by available activity data, or if activity data are unavailable, economic data. To promote data comparability and quality, registrants should be required to use emission factors from the EPA³⁰⁸ if available, or if not, describe the alternative source used. Importantly, decisions about methodology for calculating GHG emissions must be carefully scrutinized by independent auditors during the assurance process. With respect to these choices and others, the assurance process will provide a critical check on the reasoning, assumptions, and methods to ensure accurate, credible, and reliable reporting. Reasonable assurance must be required for Scopes 1, 2, and 3 emissions reporting.

125. Should we permit a registrant to use reasonable estimates when disclosing its GHG emissions as long as it also describes the assumptions underlying, and its reasons for using, the estimates, as proposed? Should we permit the use of estimates for only certain GHG emissions, such as Scope 3 emissions? Should we permit a registrant to use a reasonable estimate of its GHG emissions for its fourth fiscal quarter if no actual reported data is reasonably available, together with actual, determined GHG emissions data for its first three fiscal quarters when disclosing its GHG emissions for its most recently completed fiscal year, as long as the registrant promptly discloses in a subsequent filing any material difference between the estimate used and the actual, determined GHG emissions data for the fourth fiscal quarter, as proposed? If so, should we require a registrant to report any such material difference in its next Form 10-Q if domestic, or in a Form 6-K, if a foreign private issuer? Should we permit a domestic registrant to report any such material difference in a Form 8-K if such form is filed (rather than furnished) with the Commission? Should any such reasonable estimate be subject to conditions to help ensure accuracy and comparability? If so, what conditions should apply?

³⁰⁸ Environmental Protection Agency (EPA). 2022. “Emission Factors for Greenhouse Gas Inventories.” Modified April 1, 2022. https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf.

The Commission should permit registrants to use reasonable estimates when disclosing their GHG emissions as long as they describe the assumptions underlying, and their reasons for using, the estimates, as proposed. The Commission should not, however, permit registrants to entirely estimate Q4 emissions without any underlying data.

Instead, to alleviate compliance concerns due to time pressures, registrants should be allowed to provide GHG emissions disclosure according to a different timeline from the timeline for their Exchange Act annual report as long as the disclosure covers a 12-month period ending on the latest practicable date in its fiscal year that is no earlier than six months prior to the end of its fiscal year, and as long as the same date is used each year as the end date for its annual emissions reporting cycle and that this information is clearly disclosed in the 10-K for that fiscal year, as discussed in the response to question 105.

Allowing estimates with no underlying data to be used for part of the year's emissions could lead to disclosure integrity issues for a variety of reasons. Registrants may be incentivized to delay emissions-intensive activity—or activities with wide emissions intensity variability and higher investigative burden—for the fourth quarter where they can rely on estimation that may produce artificially low emissions figures. Registrants in different regions and sectors may naturally have emissions profiles that are not consistent throughout the year, so a registrant with very high fourth quarter emissions will be incorporating less reliable estimation for a greater portion of their overall annual emissions. Further, registrants may have an incentive to extrapolate rather than truly estimate fourth-quarter emissions.

If the SEC does allow fourth-quarter estimates, it must require that a registrant promptly disclose in a subsequent filing any material difference between the estimate used and the actual, determined GHG emissions data for the fourth fiscal quarter, as proposed. But a temporal offset of the GHG emissions reporting year from the fiscal year—as long as the actual reporting occurs in the 10-K—as described above is preferable to allowing fourth-quarter estimates, and it would promote better data quality and comparability and avoid confusion by investors who would need to keep track of amended values in 10-K/A filings if fourth-quarter estimates and corrections are allowed.

126. Should we require a registrant to disclose, to the extent material, any use of third-party data when calculating its GHG emissions, regardless of the particular scope of emissions, as proposed? Should we require the disclosure of the use of third-party data only for certain GHG emissions, such as Scope 3 emissions? Should we require the disclosure of the use of third-party data for Scope 3 emissions, regardless of its materiality to the determination of those emissions? If a registrant discloses the use of third-party data, should it also be required

to identify the source of such data and the process the registrant undertook to obtain and assess the data, as proposed?

The SEC should require a registrant to disclose any use of third-party data when calculating its GHG emissions, regardless of the particular scope of emissions, the source of such data, and the process the registrant took to obtain and assess the data, as proposed.

The SEC should not make this disclosure requirement contingent upon the registrant's determination of materiality. Disclosure of the role of third-party data is the developing global standard for GHG emissions.³⁰⁹

Importantly, the SEC should take the same approach to third-party data for its Scope 3 disclosure mandate as it takes for the Scope 1 and 2 disclosure mandate, including requiring a registrant to identify the sources of such data and the process the registrant undertook to obtain and assess the data, as proposed.

Information about the use of third-party data when calculating GHG emissions is necessary to understand and evaluate the emissions disclosures. The clause "to the extent material" should be removed to avoid confusion and provide clarity for registrants that *all* use of third-party data should be disclosed. This is critical to ensure attestation providers have all the information needed to evaluate the credibility and accuracy of GHG emissions reporting, and for users to have confidence in the disclosed values.

127. Should we require a registrant to disclose any material change to the methodology or assumptions underlying its GHG emissions disclosure from the previous year, as proposed? If so, should we require a registrant to restate its GHG emissions data for the previous year, or for the number of years for which GHG emissions data has been provided in the filing, using the changed methodology or assumptions? If a registrant's organizational or operational boundaries, in addition to methodology or assumptions, change, to what extent should we require such disclosures of the material change, restatements or reconciliations? In these cases, should we require a registrant to apply certain accounting standards or principles, such as FASB ASC Topic 250, as guidance regarding when retrospective disclosure should be required?

The SEC should require registrants to disclose any material change to the methodology or assumptions underlying their GHG emissions disclosure from the previous year, as proposed, and require registrants to restate GHG emissions data for the previous year, or for the number of

³⁰⁹ See e.g., Technical Readiness Working Group (TRWG). 2021. "Climate-Related Disclosures Prototype." TRWG, November 2021. <https://www.ifrs.org/content/dam/ifrs/groups/trwg/trwg-climate-related-disclosures-prototype.pdf>.

years for which GHG emissions data have been provided in the filing, using the changed methodology or assumptions.

If a registrant's organizational or operational boundaries change due to routine changes to business structure, restatements are not needed, but if the organization's approach to setting these boundaries changes, or there is a major business restructuring, a restatement or reconciliation should be required. Applying FASB ASC Topic 250 as guidance would be appropriate, as GHG emissions reporting is a critical component of financial reporting and should be aligned with established auditing and accounting standards and practices.

128. Should we require a registrant to disclose, to the extent material, any gaps in the data required to calculate its GHG emissions, as proposed? Should we require the disclosure of data gaps only for certain GHG emissions, such as Scope 3 emissions? If a registrant discloses any data gaps encountered when calculating its Scope 3 emissions or other type of GHG emissions, should it be required to discuss whether it used proxy data or another method to address such gaps, and how its management of any data gaps has affected the accuracy or completeness of its GHG emissions disclosure, as proposed? Are there other disclosure requirements or conditions we should adopt to help investors obtain a reasonably complete understanding of a registrant's exposure to the GHG emissions sourced by each scope of emissions?

The Commission should require registrants to disclose any gaps in the data required to calculate their Scopes 1, 2, and 3 GHG emissions, as proposed, whether they used proxy data or another method to address gaps in their Scope 3 emissions, and how management of any data gaps has affected the accuracy or completeness of GHG emissions disclosure.

129. When determining the materiality of its Scope 3 emissions, or when disclosing those emissions, should a registrant be required to include GHG emissions from outsourced activities that it previously conducted as part of its own operations, as reflected in the financial statement for the periods covered in the filing, in addition to emissions from activities in its value chain, as proposed? Would this requirement help ensure that investors receive a complete picture of a registrant's carbon footprint by precluding the registrant from excluding emissions from activities that are typically conducted as part of operations over which it has ownership or control but that are outsourced in order to reduce its Scopes 1 or 2 emissions? Should a requirement to include outsourced activities be subject to certain conditions or exceptions and, if so, what conditions or exceptions?

If the Commission elects not to mandate Scope 3 disclosures by all registrants as recommended, it should require registrants to include GHG emissions from outsourced activities previously conducted as part of their own operations.

The Commission rightly worries that if scope 3 emissions are exempted from its disclosure mandate, companies will have incentives to repackage Scope 1 and 2 emissions as Scope 3. For instance, Nature Climate Change reports³¹⁰ an interesting case where a company purchased its own equipment and signed contracts for electricity from a co-location facility. Using that structure, the company's information technology (IT) emissions fell under Scope 1 or Scope 2. However, the IT workload could easily be moved to the cloud, after which it would no longer directly generate emissions under Scope 1 and would not purchase energy under Scope 2. Therefore, all the company's IT-related emissions would move to Scope 3, with no meaningful change in its emissions profile. In another case, Exxon has started to divert flare gas to third-party crypto-mining projects as a way to reduce its Scope 1 emissions.³¹¹ If adopted broadly by the fossil fuel industry, this approach would enable the entire industry to evade disclosure of its flare gas emissions under a Commission rule that fails to require disclosure of outsourced emissions. The industry has long claimed that Scope 3 emissions from the use of its products are not material (contrary to the Commission's view of "likely" materiality expressed in the Proposal³¹²) and presumably would continue to do so if allowed to make its own materiality determinations.

Providing registrants with broad discretion to determine their scope of Scope 3 reporting, as proposed, would only encourage these kinds of accounting tricks, frustrating the Commission's investor-protection mission. The best way to prevent evasion of disclosure responsibilities is by imposing an unambiguous Scope 3 disclosure mandate for all registrants. However, if the Commission elects not to adopt the recommendation to impose such a mandate, it should require disclosure of outsourced emissions, as proposed, to prevent evasion of Scope 1 and 2 disclosures.

130. Should we require a registrant that must disclose its Scope 3 emissions to discuss whether there was any significant overlap in the categories of activities that produced the Scope 3 emissions? If so, should a registrant be required to describe any overlap, how it accounted for the overlap, and its effect on the total Scope 3 emissions, as proposed? Would this requirement help investors assess the accuracy and reliability of the Scope 3 emissions disclosure?

³¹⁰ Mytton, David. 2020. "Hiding Greenhouse Gas Emissions in the Cloud." *Nature Climate Change* 10, (July): 701. <https://www.nature.com/articles/s41558-020-0837-6>.

³¹¹ Sigalos, MacKenzie. 2022. "Exxon Is Mining Bitcoin in North Dakota as Part of Its Plan To Slash Emissions." *CNBC*, March 26, 2022, sec. Crypto World. <https://www.cnbc.com/2022/03/26/exxon-mining-bitcoin-with-crusoe-energy-in-north-dakota-bakken-region.html>.

³¹² Proposal at 21378. "For oil and gas product manufacturers, for example, Scope 3 emissions are likely to be material and thus necessary to an understanding of a registrant's climate-related risk."

The Commission should encourage registrants to discuss whether there was any significant overlap in the categories of activities that produced the Scope 3 emissions; a prescriptive approach to such discussion is not needed.

131. Should we permit a registrant to present its Scope 3 emissions in terms of a range as long as it discloses its reasons for using the range and the underlying assumptions, as proposed? Should we place limits or other parameters regarding the use of a range and, if so, what should those limits or parameters be? For example, should we require a range to be no larger than a certain size? What other conditions or guidance should we provide to help ensure that a range, if used, is not overly broad and is otherwise reasonable?

The SEC should allow registrants to describe Scope 3 emissions in terms of a range as long as they disclose their reasons for using the range and the underlying assumptions, as proposed.

The rationale and assumptions *must* be subject to reasonable assurance by an independent attestation provider. This third-party review will help establish the accuracy of the Scope 3 data provided and the credibility behind the registrant’s assertions that data gaps and uncertainties required the use of a range.

132. Should we require a registrant to follow a certain set of published standards for calculating Scope 3 emissions that have been developed for a registrant’s industry or that are otherwise broadly accepted? For example, should we require a registrant in the financial industry to follow PCAF’s Global GHG Accounting & Reporting Standard for the Financial Industry when calculating its financed emissions within the “Investments” category of Scope 3 emissions? Are there other industry-specific standards that we should require for Scope 3 emissions disclosure? Should we require a registrant to follow the GHG Protocol’s Corporate Value Chain (Scope 3) Accounting and Reporting Standard if an industry-specific standard is not available for Scope 3 emissions disclosure? If we should require the use of a third-party standard for Scope 3 emissions reporting, or any other scope of emissions, how should we implement this requirement?

The Commission should not require the use of industry-specific standards for Scope 3 emissions disclosures at this time, but it should encourage the use of established standards and require an explanation of any departure from established standards.

Industry-specific standards established by respected private institutions such as PCAF have garnered a reputation for credibility because they reflect best practices and were developed with the extensive involvement of market participants, which enhances investor confidence in the

data. The Commission should not incorporate these standards into its final rule. They are still evolving and any changes could only be adopted via additional notice-and-comment rulemaking by the Commission. The Commission can provide important protections to investors by requiring a registrant to discuss whether they used existing industry standards and any choices they made to deviate from these standards. In addition, the Commission should require that this discussion of the registrant's approach to emissions disclosure be subject to reasonable assurance by an independent attestation provider. The Commission should monitor the development and uptake of industry-specific standards to identify when further guidance may be appropriate.

133. Should we provide a safe harbor for Scope 3 emissions disclosure, as proposed? Is the scope of the proposed safe harbor clear and appropriate? For example, should the safe harbor apply to any registrant that provides Scope 3 disclosure pursuant to the proposed rules, as proposed? Should we limit the use of the safe harbor to certain classes of registrants or to registrants meeting certain conditions and, if so, which classes or conditions? For example, should we require the use of a particular methodology for calculating and reporting Scope 3 emissions, such as the PCAF Standard if the registrant is a financial institution, or the GHG Protocol Scope 3 Accounting and Reporting Standard for other types of registrants? Should we clarify the scope of persons covered by the language “by or on behalf of a registrant” by including language about outside reviewers retained by the registrant or others? Should we define a “fraudulent statement,” as proposed? Is the level of diligence required for the proposed safe harbor (i.e., that the statement was made or reaffirmed with a reasonable basis and disclosed in good faith) the appropriate standard? Should the safe harbor apply to other climate-related disclosures, such as Scopes 1 and 2 emissions disclosures, any targets and goals disclosures in response to proposed Item 1505 (discussed below), or the financial statement metrics disclosures required pursuant to Proposed Article 14 of Regulation S-X? Should the safe harbor apply indefinitely, or should we include a sunset provision that would eliminate the safe harbor some number of years, (e.g., five years) after the effective date or applicable compliance date of the rules? Should the safe harbor sunset after certain conditions are satisfied? If so, what types of conditions should we consider? What other approaches should we consider?

The Commission should not provide registrants with a safe harbor from liability for inaccurate Scope 3 disclosures. If the Commission elects not to follow this recommendation, at a minimum it should provide such a safe harbor only for a limited time period and only for Scope 3 disclosures that have received reasonable assurance.

At 17 CFR 229.1504(f), the Commission states that disclosure of Scope 3 emissions would be, as a matter of law, not considered a fraudulent statement unless it is shown that such statement was made or reaffirmed “without a reasonable basis” or was disclosed “other than in good faith.”

This safe harbor would extend to any statement regarding Scope 3 emissions disclosed pursuant to the proposed subpart 1500 of Regulation S–K and made in a document filed with the Commission.³¹³

The Commission should remove this safe harbor from liability for fraudulent Scope 3 disclosures. One of the chief benefits of mandating disclosure of emissions in the Form 10-K is that such a mandate will produce disclosures that are more reliable than voluntary disclosures because they are subject to anti-fraud enforcement. Providing registrants with the proposed safe harbor would therefore reduce the reliability of Scope 3 disclosures and the benefits of the proposed Scope 3 disclosure mandate. At a time when investors and other market participants are legitimately concerned about deceptive statements by registrants about efforts to reduce GHG emissions (see the response to question 98) the Commission must retain all of its tools to deter and remedy fraudulent emissions disclosures. Any concerns about registrants’ potential inability to secure reliable Scope 3 data are best addressed through guidance around disclosing emissions data reliability concerns (see response to question 106) rather than reducing investor protections.

If the safe harbor and registrant-by-registrant materiality determinations are included in the final rule, against recommendations, then the Commission should make clear that the safe harbor applies only to Scope 3 disclosures themselves and not to negative materiality determinations that result in no disclosure of Scope 3 emissions. Extending the safe harbor to negative materiality determinations would incentivize such determinations and thereby exacerbate the problem of inadequate Scope 3 disclosures.

In addition, if the safe harbor is included in the final rule, the Commission should limit its duration to three years. By making the safe harbor temporary, the Commission would address registrants’ concerns about potential fraud liability for disclosing unreliable Scope 3 data, which will be relatively time-limited as the emissions data service providers and auditors become increasingly effective. At the same time, the damage to investor protection would be circumscribed.

Finally, if the proposed safe harbor is included in the final rule, the Commission should clarify “without a reasonable basis.” This definition should make clear that an inaccurate disclosure of Scope 3 emissions data made without reasonable assurance is, as a matter of law, “without a reasonable basis.” This would send an important message to registrants that if they are aware of

³¹³ Proposal at 21469. For purposes of the proposed safe harbor, the term “fraudulent statement” would be defined to mean a statement that is an untrue statement of material fact, a statement false or misleading with respect to any material fact, an omission to state a material fact necessary to make a statement not misleading, or that constitutes the employment of a manipulative, deceptive, or fraudulent device, contrivance, scheme, transaction, act, practice, course of business, or an artifice to defraud as those terms are used in the Securities Act or the Exchange Act or the rules or regulations promulgated thereunder. This definition is based on the definition of fraudulent statement in 17 CFR 230.175.

problems with the reliability of Scope 3 data, they should address those problems by enlisting a third-party verifier, who can help to ensure that they are properly calculated and disclosed to investors.

Imposing such a requirement would not eliminate the scienter requirement in securities fraud cases. However, it would avoid putting insurmountable hurdles in front of the Commission in bringing cases to enjoin or otherwise remedy securities fraud.

To prove a violation of the anti-fraud provisions of Section 17(a)(1) of the Securities Act or Section 10(b) of the Exchange Act and Rule 10b-5, the government or private plaintiff must show that the defendant acted with scienter, defined as "an intent on the part of the defendant to deceive, manipulate, or defraud."³¹⁴ *Aaron v. SEC*, 445 U.S. 680 (1980). Proof of such intent can be buttressed with evidence of "reckless behavior."³¹⁵ In defining "without a reasonable basis" in a safe harbor rule, the Commission should be careful not to undercut this critical enforcement tool. Instead, it should make clear that failure to seek a "reasonable assurance" attestation from an independent verifier eliminates the registrant's ability to claim the safe harbor and that the Commission retains its ability to prove the recklessness of a false Scope 3 emissions disclosure.

134. Should we provide an exemption from Scope 3 emissions disclosure for SRCs, as proposed? Should the exemption not apply to a SRC that has set a target or goal or otherwise made a commitment to reduce its Scope 3 emissions? Are there other classes of registrants we should exempt from the Scope 3 emissions disclosure requirement? For example, should we exempt EGCs, foreign private issuers, or a registrant that is filing or has filed a registration statement for its initial public offering during its most recently completed fiscal year from the Scope 3 disclosure requirement? Instead of an exemption, should we provide a longer phase in for the Scope 3 disclosure requirements for SRCs than for other registrants?

The Commission should not provide an exemption from Scope 3 emissions disclosure for Small Reporting Companies (SRCs), but rather require disclosure along a delayed timeline, starting in FY 2026, as discussed in the response to question 197.

As the Commission recognizes, SRCs may not currently have the resources to obtain and disclose Scope 3 emissions data.³¹⁶ To address this, it should adopt a delayed timeline for SRCs providing such disclosures rather than a wholesale exemption to address these resource

³¹⁴ *Aaron v. SEC*, 445 U.S. 680 (1980).

³¹⁵ Allowing the Commission to rely entirely on evidence of recklessness in obtaining an injunction has been approved by some lower courts; the Supreme Court in the *Aaron* case elected not to weigh in on the appropriateness of this approach. See generally, Skoumal, Steve M. 1981. "Aaron v. SEC: The Scienter Requirement in SEC Injunctive Actions." *Denver Law Review* 58, no. 2 (January).
<https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=3011&context=dlr>.

³¹⁶ Proposal at 21391.

constraints. A delayed timeline would enable SRCs to enjoy the significant cost savings arising from the data collection and methodological improvements undertaken by larger registrants. It also would enable SRCs to take advantage of the steadily growing numbers of data services providers, with attendant cost savings.

Offering a wholesale exemption is unsupported by the extensive research, discussed throughout these comments, showing that climate-related financial risks are widely dispersed throughout the economy and not limited to large registrants. In addition, given their smaller size, SRCs are likely to have significantly less costs in assessing and disclosing Scope 3 emissions than large registrants.

For these reasons, the Commission should not exempt SRCs from the Scope 3 disclosure requirements but should offer a delayed timeline.

135. Should we require accelerated filers and large accelerated filers to obtain an attestation report covering their Scope 1 and Scope 2 emissions disclosure, as proposed? Should we require accelerated filers and large accelerated filers to obtain an attestation report covering other aspects of their climate-related disclosures beyond Scope 1 and 2 emissions? For example, should we also require the attestation of GHG intensity metrics, or of Scope 3 emissions, if disclosed? Conversely, should we require accelerated filers and large accelerated filers to obtain assurance covering SME only Scope 1 emissions disclosure? Should any voluntary assurance obtained by these filers after limited assurance is required be required to follow the same attestation requirements of Item 1505(b)–(d), as proposed?

Accelerated filers and large accelerated filers should be required to obtain an attestation report covering their Scope 1 and Scope 2 emissions disclosure, as proposed, but on an accelerated timeline. Any voluntary assurance obtained by these filers after limited assurance is required should be required to follow the same attestation requirements of Item 1505(b)-(d), as proposed.

The Commission should take the same approach to limited assurance for Scope 3 disclosures as it takes for Scope 1 and 2 disclosures: a brief interim step toward phasing in a reasonable assurance requirement by independent verifiers. Moreover, because the Commission is not establishing minimum standards for limited assurance engagements, it should require that registrants disclose the terms that they negotiate with third-party verification firms to enable investors to evaluate the adequacy of third-party oversight.

A key need is for the Commission to keep the limited assurance engagement as brief as possible and require that registrants move quickly to the far more reliable engagement with firms that provide attestations with reasonable assurance. As explained in response to questions 1 and 90,

Scope 3 emissions provide investors with critical insights into the financial condition of a registrant. They often have a clear connection to financial statement items (e.g., value of long-term assets). Ensuring the reliability of these disclosures is a critical need of investors and other market participants.

Although the PCAOB does not authorize limited assurance in annual audits of financial statements, it allows for a variation of limited assurance in quarterly or interim reviews. Though the Commission is not proposing to follow the PCAOB standard for interim reviews, its experience with these reviews is instructive, highlighting why limited assurance is inappropriate: it allows registrants to decide what evidence will be shared with auditors when negotiating the engagement. See question 141 for further discussion of the limitations of limited assurance.

According to PCAOB AS 4105: "[An interim] review consists principally of performing analytical procedures and making inquiries of persons responsible for financial and accounting matters, and does not contemplate (a) tests of accounting records through inspection, observation, or confirmation; (b) tests of controls to evaluate their effectiveness; (c) obtaining corroborating evidence in response to inquiries; or (d) performing certain other procedures ordinarily performed in an audit. A review may bring to the accountant's attention significant matters affecting the interim financial information, but it does not provide assurance that the accountant will become aware of all significant matters that would be identified in an audit."³¹⁷

Unlike in a reasonable assurance audit, in which the burden is on the issuer and auditor to design the audit in a way that enables the auditor to affirmatively state that the disclosures are fair, the auditor in a limited assurance audit is not empowered to request information from the issuer that it deems necessary to make such an affirmative finding. Instead, in a limited assurance audit, the issuer can define what information will be shared with the auditor, resulting in a statement from the auditor that nothing has come to its attention suggesting that management's assertion is inaccurate.

Limited assurance reports, by definition, entail a greater risk than reasonable assurance reports that the registrant's Scope 3 disclosures will be inaccurate, incomplete, or misleading. The Proposal suggests that requiring reasonable assurance is not feasible for Scope 3 emissions disclosures due to the lack of standardized data sets. However, disclosure of Scope 3 emissions is no different from any other disclosures the Commission requires to be audited or verified. Insofar as there is data uncertainty, independent verifiers can take the same approach to current and projected GHG emissions that auditors take in evaluating management assertions about financial statements. When reviewing financial statements, auditors offer an opinion on the registrant's conformity with relevant standards and describe the range of uncertainties based on relevant

³¹⁷ Public Company Accounting Oversight Board (PCAOB). N.d. "AS 4105: Reviews of Interim Financial Information." Auditing Standards. Accessed June 14, 2022. <https://pcaobus.org/oversight/standards/auditing-standards/details/AS4105>.

inputs, data gaps and assumptions. Just as auditors test the five dimensions of management assertions about financial statements, independent verifiers can test them in a review of GHG emissions disclosures.

Any claim that independent verifiers will lack the data they need for providing reasonable assurance is belied by the fact that many companies are already disclosing Scope 3 emissions, and many more are preparing to do so. See the response to question 93.

136. If we required accelerated filers and large accelerated filers to obtain an attestation report covering Scope 3 emissions disclosure, should the requirement be phased-in over time? If so, what time frame? Should we require all Scope 3 emissions disclosure to be subject to assurance or only certain categories of Scope 3 emissions? Would it be possible for accelerated filers and large accelerated filers to obtain an attestation report covering the process or methodology for calculating Scope 3 emissions rather than obtaining an attestation report covering the calculations of Scope 3 emissions? Alternatively, is there another form of verification over Scope 3 disclosure that would be more appropriate than obtaining an attestation report?

With exception of reports submitted by SRCs, Scope 3 attestation reports should be subject to the same timelines as Scope 1 and 2 disclosures depending on the types of filer. All categories of Scope 3 emissions should be subject to reasonable assurance, and the attestation should cover the entire calculation of Scope 3 emissions, not merely the process or methodology.

Because of the choices, and assumptions regarding Scope 3 calculation outlined throughout this letter, it is critical that Scope 3 emissions reporting is reasonably assured by an independent verifier.

137. Should the attestation requirement be limited to accelerated filers and large accelerated filers, as proposed? Alternatively, should the attestation requirement be limited to a subset of accelerated filers and large accelerated filers? If so, what conditions should apply? Should the attestation requirement only apply to well-known seasoned issuers? Should the attestation requirement also apply to other types of registrants? Should we create a new test for determining whether the attestation requirements apply to a registrant that would take into account the resources of the registrant and also apply to initial public which includes a separate determination for initial registration statements, but using higher offerings? For example, should we create a test similar to the SRC definition, public float and annual revenue amounts?

The attestation requirement should apply to all registrants according to the timeline described in the response to question 197, which includes reasonable delays for smaller registrants to reduce costs to smaller firms with fewer resources, and to allow time for capacity building for the assurance providers.

138. Instead of requiring only accelerated filers and large accelerated filers to include an attestation report for Scope 1 and Scope 2 emissions, should the proposed attestation requirements also apply to registrants other than accelerated filers and large accelerated filers? If so, should the requirement apply only after a specified transition period? Should such registrants be required to provide assurance at the same level as accelerated filers and large accelerated filers and over the same scope of GHG emissions disclosure, or should we impose lesser requirements (e.g., only limited assurance and/or assurance over Scope 1 emissions disclosure only)?

The proposed attestation requirements should apply to all registrants, not just accelerated filers and large accelerated filers. The deadlines for these attestations should be identical for all registrants, except that the Commission should provide SRCs with a delayed timeline for Scope 3 attestations.

Once GHG emissions attestations become mandatory, the data services industry will increase in capacity and its methodologies and best practices will be refined. Likewise, registrants and attestation providers will become more skilled and the costs of disclosure and assurance processes will decline.

139. Should we require accelerated filers and large accelerated filers to initially include attestation reports reflecting attestation engagements at a limited assurance level, eventually increasing to a reasonable assurance level, as proposed? What level of assurance should apply to the proposed GHG emissions disclosure, if any, and when should that level apply? Should we provide a one fiscal year transition period between the GHG emissions disclosure compliance date and when limited assurance would be required for accelerated filers and large accelerated filers, as proposed? Should we provide an additional two fiscal year transition period between when limited assurance is first required and when reasonable assurance is required for accelerated filers and large accelerated filers, as proposed?

The Commission should require large accelerated filers, accelerated filers, and non-accelerated filers to initially include attestation reports reflecting attestation engagements at a limited assurance level, eventually increasing to a reasonable assurance level, but on a faster timeline discussed in the responses to question 197.

Providing a one-fiscal-year transition period between the GHG emissions disclosure compliance date and when limited assurance would be required for accelerated filers and large accelerated filers, as proposed, is reasonable, but the transition between when limited assurance is first required and when reasonable assurance is required should be one fiscal year. A five-year timeline for implementation of these attestation requirements is excessive, given that various attestation providers are already providing limited and reasonable assurance of GHG emissions reporting.³¹⁸

140. Should we provide the same transition periods (from the Scopes 1 and 2 emissions disclosure compliance date) for accelerated filers and large accelerated filers, as proposed? Instead, should different transition periods apply to accelerated filers and large accelerated filers? Should we provide transition periods with different lengths than those proposed? Should we require the attestation to be at a reasonable assurance level without having a transition period where only limited assurance is required? Should we instead impose assurance requirements to coincide with reporting compliance periods?

Accelerated filers and large accelerated filers should have the same transition periods, as proposed, with one-fiscal-year gaps between the initial reporting year, a limited assurance requirement, and a reasonable assurance requirement.

141. Under prevailing attestation standards, “limited assurance” and “reasonable assurance” are defined terms that we believe are generally understood in the marketplace, both by those seeking and those engaged to provide such assurance. As a result, we have not proposed definitions of those terms. Should we define “limited assurance” and “reasonable assurance” and, if so, how should we define them? Would providing definitions in this context cause confusion in other attestation engagements not covered by the proposed rules? Are the differences between these types of attestation engagements sufficiently clear without providing definitions?

The Commission should provide a definition for “limited assurance” in this context to establish minimum standards for the engagement.

³¹⁸ Deloitte. 2021. “Environmental, Social, and Governance Considerations: Corporate Reporting and Assurance Basics.” Deloitte, 2021. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Audit/gx-audit-environment-social-and-governance-considerations-corporate-reporting-and-assurance-basics.pdf>; Posner, Cydney. 2021. “The Reliability of Your Company’s Carbon Footprint.” Harvard Law School Forum on Corporate Governance, October 4, 2021. <https://corpgov.law.harvard.edu/2021/10/04/the-reliability-of-your-companys-carbon-footprint/>.

The proposal suggests that limited assurance is analogous to the assurance for interim or quarterly financial statements (10-Qs), but these standards and processes are not totally analogous. Quarterly reviews require auditors to attest that they have found nothing inconsistent with their full yearly audit, but that “negative” attestation depends on the surrounding context and understanding developed by the auditor during their yearly audit conducted at a reasonable assurance level. The SEC should set timelines and requirements for limited and reasonable assurance that reflect that limited assurance in this context is a much less rigorous standard, as discussed in the response to question 135.

The Commission should also provide a definition for “limited assurance” to establish a process more rigorous than that currently used for assurance of quarterly SEC filings, acknowledging that such a standard is not appropriate given the lack of a prior reasonable assurance engagement for Scope 3 emissions between the attestation provider and the registrant. A limited assurance engagement in this context must establish minimum standards including that:

- The organizational and operational boundaries for GHG reporting were reasonably set, justified, and disclosed
- Where the registrant lacked primary, measured data, they used credible data sources and properly disclosed all data inputs and assumptions in their filings
- Calculations themselves are accurately performed
- Disclosure is adequate, and in compliance with the requirements set forth by this rule

Reasonable assurance in this context would require additional investigative steps commensurate with the reasonable assurance provided for the consolidated financial statements pursuant to Regulation S-X.

143. We considered whether to require registrants to include the GHG emissions metrics in the notes or a separate schedule to their financial statements, by amending Regulation S-X instead of Regulation S-K.

(i) Would there be benefits to including this information in the registrant's financial statements? For example, would requiring the GHG emissions disclosure to be included in the financial statements improve the consistency, comparability, reliability, and decision-usefulness of the information for investors? Would it facilitate the integration of GHG metrics and targets into the registrant's financial analysis? Would such placement cause registrants to incur significantly more expense in obtaining an audit of the disclosure? If so, please quantify those additional expenses where possible.

(ii) Should we require a registrant to include the GHG emissions disclosure in its audited financial statements so that the disclosure would be subject to the existing requirements for an

independent audit and ICFR? If so, we seek comment on the following aspects of this alternative:

(a) If GHG emissions disclosure is subject to ICFR, or an internal control framework similar to ICFR, would GHG emissions disclosure be more reliable compared to what is currently proposed? What are the benefits or costs?

(b) Should the GHG emissions disclosure be included in a note to the registrant's financial statements (e.g., in the note where the proposed financial statement metrics as discussed above in Section II.F would be included) or in a schedule, or somewhere else? If the GHG emissions disclosure was required in the financial statements, should it be subject to a reasonable assurance audit like the other information in the financial statements? If in a schedule, should the GHG emissions disclosure be disclosed in a schedule similar to those required under Article 12 of Regulation S-X, which would subject the disclosure to audit and ICFR requirements? Should we instead require the metrics to be disclosed as supplemental financial information, similar to the disclosure requirements under FASB ASC Topic 932-235-50-2 for registrants that have significant oil- and gas-producing activities? If so, should such supplemental schedule be subject to ICFR requirements? Instead of requiring the GHG emissions disclosure to be included in a note to the registrant's audited financial statements, should we require a new financial statement for such metrics?

(c) PCAOB auditing standards apply to the audit of a registrant's financial statements. If GHG emissions disclosure is included in a supplemental schedule to the financial statements, should we allow other auditing standards to be applied? If so, which ones? What, if any, additional guidance or revisions to such standards would be needed in order to apply them to the audit of GHG emissions disclosure?

(d) What are the costs and benefits of employing registered public accounting firms to perform audits of GHG emissions disclosure and related attestation of internal controls? Are there potential cost savings in employing registered public accountants that currently perform audits of financial statements and attestation of ICFR to review GHG emissions disclosure and any related internal controls? If we require GHG emissions disclosure to be presented in the financial statements, should we permit entities other than registered public accounting firms to provide assurance of this information, as proposed for the current attestation requirements under Regulation S-K? If not limited to registered public accounting firms, who should be permitted to provide assurance of GHG emissions disclosure? Should we permit environmental consultants, engineering firms, or other types of specialists to provide assurance? What are the costs and benefits of such approach? Would the reliability of the audits and therefore the information disclosed be affected if assurance providers other than registered public accounting firms are permitted to conduct these audits? Please provide supporting data where possible. If we should allow for assurance providers that are not registered public accounting firms, what qualifications and oversight should they have, and what requirements should we impose on them? Should we direct the PCAOB to develop a

separate registration process for service providers that are not otherwise registered? What expertise, independence and quality control standards should apply?

(e) What would be the other potential benefits and costs of such an approach?

GHG emissions should be included in Regulation S-X (see the responses to questions 1 and 90). However, should GHG emissions reporting not be included in Regulation S-X as recommended, but instead in Regulation S-K, it is critically important that these disclosures are still subject to audit review at the reasonable assurance level.

As discussed in the response to question 135, GHG emissions reporting is a critical component of financial reporting and thus warrants the comparability, transparency, and safeguards that accompany inclusion in Regulation S-X and reasonable assurance.

Additionally, audit standards should be updated to reflect best practices for climate-related disclosure assurance. As discussed in response to question 91, PCAOB should immediately issue guidance calling on auditors to consider climate-related risks as part of their audits under existing requirements, following the format of IAASB, highlighting key consistency checks across company reporting, such as a comparison of any stated emissions-reductions goals and the effect achieving those goals would have on financial statement items. The PCAOB should also begin preparing a separate standard based on the proposed rule.

144. Should we require a registrant to obtain a GHG emissions attestation report that is provided by a GHG emissions attestation provider that meets specified requirements, as proposed? Should one of the requirements be that the attestation provider is an expert in GHG emissions, with significant experience in measuring, analyzing, reporting, or attesting to GHG emissions, as proposed? Should we specify that significant experience means having sufficient competence and capabilities necessary to: (a) perform engagements in accordance with professional standards and applicable legal and regulatory requirements and (b) enable the service provider to issue reports that are appropriate under the circumstances, as proposed? Should we instead require that the GHG emissions attestation provider have a specified number of years of the requisite type of experience, such as 1, 3, 5, or more years? Should we specify that a GHG emissions attestation provider meets the expertise requirements if it is a member in good standing of a specified accreditation body that provides oversight to service providers that apply attestation standards? If so, which accreditation body or bodies should we consider (e.g., AICPA)? Are there any other requirements for the attestation provider that we should specify? Instead, should we require a GHG emissions attestation provider to be a PCAOB-registered audit firm?

The SEC should require a registrant to obtain a GHG emissions attestation report that is provided by a GHG emissions attestation provider that meets specified requirements, as proposed.

Eligible attestation providers should not be limited to only PCAOB-registered audit firms, but the SEC will need to conduct enhanced monitoring and enforcement of the assurance, as the attesting entities will be neither inspected by the PCAOB nor subject to PCAOB standards and enforcement.

146. Should we require the GHG emissions attestation provider to be independent with respect to the registrant, and any of its affiliates, for whom it is providing the attestation report, as proposed? Should we specify that a GHG emissions attestation provider is not independent if such attestation provider is not, or a reasonable investor with knowledge of all relevant facts and circumstances would conclude that such attestation provider is not, capable of exercising objective and impartial judgment on all issues encompassed within the attestation provider's engagement, as proposed? The proposed provision is based on a similar provision regarding the qualification of an accountant to be an independent auditor under Rule 2-01 of Regulation S-X. Is Rule 2-01 an appropriate model for determining the independence of a GHG emissions attestation provider? Is being independent from a registrant and its affiliates an appropriate qualification for a GHG emissions attestation provider?

The SEC should require the GHG emissions attestation provider to be independent with respect to the registrant, and any of its affiliates, for whom it is providing the attestation report, as proposed.

This is an important requirement for independent auditors under Rule 2-01 of Regulation S-X that raises the credibility and accuracy of financial reporting, and since GHG emissions reporting is a critical component of financial reporting, it is appropriate to apply the same standard.

155. Should we require that the attestation standards used be publicly available at no cost to investors, as proposed? Should we permit the use of attestation standards, even if not publicly available at no cost, provided that registrants provide access to those standards at the request of their investors?

Attestation standards used should be publicly available at no cost to investors, as proposed. Because this information will provide important benefits to a variety of market participants, disclosure should not be limited to cases where standards are requested by investors.

156. Should we require the GHG emissions attestation report to meet certain minimum requirements in addition to any form and content requirements set forth by the attestation standard or standards used by the GHG emissions attestation provider, as proposed? Should we instead require that the attestation report solely meet whatever requirements are established by the attestation standard or standards used?

The Commission should require the GHG emissions attestation report to meet certain minimum requirements in addition to any form and content requirements set forth by the attestation standard or standards used by the GHG emissions attestation provider, as proposed.

157. Should we adopt each of the proposed minimum requirements? Are there any proposed requirements that we should omit or add to the proposed list of minimum GHG emissions attestation report requirements?

The SEC should adopt each of the proposed minimum requirements.

160. Should we require certain items of disclosure related to the attestation of a registrant's GHG emissions to be provided by the registrant in its filing that includes the attestation report (where the GHG emissions and other climate-related disclosures are presented), based on relevant information obtained from the GHG emissions attestation provider, as proposed? Should these additional items of disclosure instead be included in the attestation report?

The SEC should require certain items of disclosure related to the attestation of a registrant's GHG emissions to be provided by the registrant in its filing that includes the attestation report (where the GHG emissions and other climate-related disclosures are presented), based on relevant information obtained from the GHG emissions attestation provider, as proposed.

161. Should we require the registrant to disclose whether the attestation provider has a license from any licensing or accreditation body to provide assurance, and if so, the identity of the licensing or accreditation body, and whether the attestation provider is a member in good standing of that licensing or accreditation body, as proposed? In lieu of disclosure, should we require a GHG emissions attestation provider to be licensed to provide assurance by specified licensing or accreditation bodies? If so, which licensing or accreditation bodies should we specify?

The SEC should require the registrant to disclose whether the attestation provider has a license from any licensing or accreditation body to provide assurance, and if so, the identity of the

licensing or accreditation body, and whether the attestation provider is a member in good standing of that licensing or accreditation body, as proposed. This information on licensing and standing should be updated as part of each annual disclosure.

162. Should we require a registrant to disclose whether the GHG emissions attestation engagement is subject to any oversight inspection program, and if so, which program (or programs), as proposed? Should we instead require the registrant to disclose whether the attestation engagement is subject to certain specified oversight programs? If so, which oversight programs should we specify?

The SEC should require a registrant to disclose whether the GHG emissions attestation engagement is subject to any oversight inspection program, and if so, which program (or programs), as proposed.

164. Should we require a registrant that is not required to include a GHG emissions attestation report pursuant to proposed Item 1505(a) to disclose within the separately captioned “Climate-Related Disclosure” section in the filing the following information, if the registrant’s GHG emissions disclosure was subject to third-party attestation or verification, as proposed:

- (i) Identify the provider of such assurance or verification;***
- (ii) Disclose the assurance or verification standard used;***
- (iii) Describe the level and scope of assurance or verification provided;***
- (iv) Briefly describe the results of the assurance or verification;***
- (v) Disclose whether the third-party service provider has any other business relationships with or has provided any other professional services to the registrant that may lead to an impairment of the service provider’s independence with respect to the registrant; and***
- (vi) Disclose any oversight inspection program to which the service provider is subject (e.g., the AICPA’s peer review program), each as proposed?***

Are there other disclosure items that we should require if a registrant has obtained voluntary assurance or verification of the climate-related disclosures? Are there any of the proposed disclosure items that we should omit? Should we specify parameters or include guidance on when the services provided by a third-party would be considered “assurance” or “verification” and thus require disclosure pursuant to the proposed rules? Should a registrant be required to furnish a copy of or provide a link to the assurance or verification report so that it is readily accessible by an investor?

If a registrant receives assurance for their GHG emissions, regardless of whether they are required to do so under the final SEC rule, they should be required to disclose this information within the separately captioned “Climate-Related Disclosure” section in the filing, as proposed.

168. Should we require a registrant to disclose whether it has set any targets related to the reduction of GHG emissions, as proposed? Should we also require a registrant to disclose whether it has set any other climate-related target or goal, e.g., regarding energy usage, water usage, conservation or ecosystem restoration, or revenues from low-carbon products, in line with anticipated regulatory requirements, market constraints, or other goals, as proposed? Are there any other climate-related targets or goals that we should specify and, if so, which targets or goals? Is it clear when disclosure under this proposed item would be triggered, or do we need to provide additional guidance? Would our proposal discourage registrants from setting such targets or goals?

The Commission should require a registrant to disclose whether it has set any targets related to the reduction of GHG emissions, as proposed. The Commission should also require a registrant to disclose whether it has set any other climate-related target or goal, including those for energy usage, water usage, conservation or ecosystem restoration, or revenues from low-carbon products, in line with anticipated regulatory requirements, market constraints, or other goals, as proposed.

Growing shareholder demand is indicative of wider investor pressure for GHG emissions disclosure and associated targets for reduction. Research shows that investors pay attention to well-structured and meaningful climate goals and targets. One recent survey indicated that investors have rewarded firms with clearer climate goals and targets, and orient their investments strategically to reduce long-run climate transition risk.³¹⁹ Compared to the previous three years, 2022 has seen the highest number of proposals on emission-reduction targets filed at annual meetings by shareholders. This comes in addition to proposals submitted on climate change reports more generally or other ESG-related proposals.³²⁰

Registrants will continue to set climate goals and targets to respond to investor demand, and similar pressures from policy makers, customers, and others within registrants’ value chains. Although setting climate goals and targets leads to greater disclosure obligations under the Commission’s proposal, it will not override the significant incentives and current momentum for

³¹⁹ Ramelli, Stefano, Alexander F. Wagner, Richard J. Zeckhauser, and Alexandre Ziegler. 2019. “Investor Rewards to Climate Responsibility: Evidence from the 2016 Climate Policy Shock.” National Bureau of Economic Research Working Paper 25310. https://www.nber.org/system/files/working_papers/w25310/w25310.pdf.

³²⁰ FTI Consulting. 2022. “From Reporting to Reducing Emissions: Investors Expect Climate Action in 2022.” FTI Journal, March 4, 2022. <https://www.fticonsulting.com/insights/fti-journal/reporting-reducing-emissions-investors-expect-climate-action-2022>.

registrants to set such goals and targets. In fact, a 2021 SBTi progress report published in May 2022 found that of the 80 percent of companies with approved SBTi targets in line with the science-based 1.5°C goal, 63 percent of them stated intentions to cut their emissions at a higher rate than is required.³²¹

The disclosures of goals and targets, including clear pathways and metrics, provide little transparency for investors and are subject to little accountability when they do not line up with actual capital allocations or managerial decisions. A 2020 paper, for example, documented how climate commitments from three major electric utilities (which collectively owned nearly 13 percent of U.S. generating capacity), were not reflected in long-run capital allocation decisions as gathered from state regulatory proceedings.³²² The emissions of the three utilities were projected to exceed their corporate commitments by roughly double in just two decades, in most cases plateauing rather than hitting the decarbonization targets touted by the corporations. A subsequent benchmarking assessment in 2021 found that of a cohort of 19 major electric utilities with a “net-zero” emissions pledge, the combined companies planned to transition just one-third of the high emissions generation fleet and replace less than a quarter of existing emitting generation with clean energy.³²³

For major emitters, corporate climate goals and targets are often clarified only after investors and other stakeholders demonstrate that vague goals are neither meaningful nor acceptable responses to transition risk. For example, only after substantial public attention, stakeholder pressure, and state legislation in its major service territories did Duke Energy begin to provide clarity to the nature of its vague climate goals. As of 2020, the utility had set a goal to meet a CO₂ emissions reduction of 50 percent by 2030 (relative to 2005) and net-zero emissions by 2050, but was critiqued as producing capital investment plans that did not reflect these vague goals.³²⁴ In February 2022, Duke Energy announced a new climate goal to retire the entirety of its coal fleet by 2035, and set a Scope 1 and 2 net-zero goal for the year 2050.³²⁵ A review of its resource plans submitted to the state utility commissions indicates a continued reliance on coal-fired power through 2035 (>40 percent of existing capacity), and replacement of nearly half of the

³²¹ Science Based Targets initiative (SBTi). 2021. SBTi Progress Report 2021: Scaling Urgent Corporate Climate Action Worldwide. SBTi. <https://sciencebasedtargets.org/reports/sbti-progress-report-2021>.

³²² Biewald, Bruce, Devi Glick, Jamie Hall, Caitlin Odom, Cheryl Roberto, and Rachel Wilson. 2020. *Investing in Failure: How Large Power Companies Are Undermining their Decarbonization Targets*. Majority Action. <https://www.majorityaction.us/investing-in-failure>.

³²³ Romankiewicz, John, Cara Bottorff, and Leah C. Stokes. 2020. *The Dirty Truth About Utility Climate Pledges*. Oakland, CA: Sierra Club. <https://coal.sierraclub.org/the-problem/dirty-truth-greenwashing-utilities>.

³²⁴ See Biewald, Bruce, Devi Glick, Jamie Hall, Caitlin Odom, Cheryl Roberto, and Rachel Wilson. 2020. *Investing in Failure: How Large Power Companies Are Undermining their Decarbonization Targets*. Majority Action. <https://www.majorityaction.us/investing-in-failure>. See also Climate Report Review Group. Duke Energy’s 2020 Climate Report and Associated Duke Energy Climate Strategy. On behalf of Charlotte Mecklenburg Climate Leaders. January 2021. *Review-of-Duke-Energy-2020-Climate-Report.pdf* (cleanairenc.org), <https://cleanairenc.org/wp-content/uploads/2021/07/Review-of-Duke-Energy-2020-Climate-Report.pdf>

³²⁵ Duke Energy. 2022. “Duke Energy Expands Clean Energy Action Plan.” Press release, February 9, 2022. <https://news.duke-energy.com/releases/duke-energy-expands-clean-energy-action-plan>.

capacity with new gas-fired power through 2040.³²⁶ Only a closer read of Duke Energy's regulatory filings indicates that achieving the corporate net zero target relies on specific price scenarios and the ability of the company's gas fleet to burn 100 percent green hydrogen.³²⁷ A lack of transparency with investors about such unsubstantiated assumptions is precisely why the Commission should require detailed GHG and climate-related disclosures from companies related to their targets and goals.

It is critical for investors to have access to any and all GHG emissions targets, as well as other climate-related targets and goals, for all registrants in their portfolios, in order to understand the climate-related risks associated with investment in any given registrant. As noted in the discussion in response to questions 46-48 on transition plans, investors need to be able to judge the seriousness and credibility of registrant's targets and plans, and analyze progress or lack thereof. Given the implications of the transition, many registrants have sought to decarbonize their own operations and have made public commitments to do so. To help investors better understand how registrants plan to fulfill those commitments, as well as which registrants are best positioned to meet their own stated commitments to address transition risk, the Commission should require disclosure of these targets.

169. Should we require a registrant, when disclosing its targets or goals, to disclose:

- ***The scope of activities and emissions included in the target;***
- ***The unit of measurement, including whether the target is absolute or intensity based;***
- ***The defined time horizon by which the target is intended to be achieved, and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, or organization;***
- ***The defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets;***
- ***Any intervening targets set by the registrant; and***
- ***How it intends to meet its targets or goals, each as proposed?***

Are there any other items of information about a registrant's climate-related targets or goals that we should require to be disclosed, in addition to or instead of these proposed items? Are there any proposed items regarding such targets or goals that we should exclude from the required disclosure? If a registrant has set multiple targets or goals, should it be permitted to establish different base years for those targets or goals?"

The SEC should require a registrant, when disclosing its targets or goals, to disclose the following, as proposed:

³²⁶ See Duke Energy Indiana. 2021. *Duke Indiana 2021 Integrated Resource Plan*. Charlotte, NC: Duke Energy Indiana. <https://www.in.gov/iurc/files/REVISED-PUBLIC-DUKE-ENERGY-INDIANA-2021-IRP-VOLUME-I.pdf>, at 133.

³²⁷ *Ibid*, at 19.

1. The scope of activities and emissions included in the target
2. The unit of measurement, including whether the target is absolute or intensity based
3. The defined time horizon by which the target is intended to be achieved, and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, or organization
4. The defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets
5. Any intervening targets set by the registrant
6. How the registrant intends to meet its targets or goals

This item should be added:

7. *Whether and to what extent the registrant can meet its targets or goals using currently available methods and technologies, the extent to which its plan relies on the availability of any new or non-commercial technology or the availability of non-sectoral offsets, and the extent to which it depends on any other factors outside of the control of the registrant.*

The Commission should require registrants to be detailed and specific when disclosing ‘how the registrant intends to meet its targets or goals.’ See response to question 170.

The Commission does not need to dictate a base year or target year for any registrant’s climate-related goals, but for the sake of standardization and decision usefulness for investors the base year for comparison within each goal type should be consistent across target years. The Commission should require that historical data still be provided by a registrant even if those data were collected before an established base year for emissions for the purposes of target setting.

If a base year needs to be adjusted due to major shifts for a registrant, such as a change in its organizational boundaries that triggers a significant cumulative change in the organization’s base year emissions, then the registrant should ensure that all targets within that type are re-aligned to that new base year. The Climate Registry recommends disclosures including:

Explanation of how the base year was selected; Documentation of procedure used to review and adjust base year emissions; Justification for a change to a different base year; Explanation of any base year adjustments and when they occurred; and, Explanation of new methodologies which trigger a base year adjustment but are not available to adjust the base year (if the organization chooses to maintain the same base year without an adjustment to incorporate the new methods).³²⁸

³²⁸ The Climate Registry. N.d. “Tracking Emissions Over Time: Guidance.” The Climate Registry. <https://www.theclimateregistry.org/guidance/Tracking-Emissions-Over-Time.pdf>.

170. Should we require a registrant to discuss how it intends to meet its climate-related targets or goals, as proposed? Should we provide examples of potential items of discussion about a target or goal regarding GHG emissions reduction, such as a strategy to increase energy efficiency, a transition to lower carbon products, purchasing carbon offsets or RECs, or engaging in carbon removal and carbon storage, as proposed? Should we provide additional examples of items of discussion about climate-related targets or goals and, if so, what items should we add? Should we remove any of the proposed examples of items of discussion?

The Commission should require a registrant to discuss how it intends to meet its climate-related targets or goals, as proposed.

The Commission should require registrants to be detailed and specific when discussing the items proposed for disclosure in our response to question 169, and in disclosing how they intend to meet their targets and goals. Registrants should be required to state how much of their targets will be met by actual emissions reductions (fuel or energy source switching, energy efficiency, etc.) versus other methods.

Registrants need to specify the role and proportion of each method of emissions reduction or netting required to achieve any given target fully over the relevant time period. For example: “For our 2030 target, we will achieve 14 percent of our reduction through energy efficiency gains in X process; 54 percent by switching our sourcing from natural gas to renewable energy; 25 percent by switching transportation technologies from Y to Z; 7 percent by buying offsets—adding up to 100 percent of the target.”

The Commission should provide examples of potential items of discussion for a registrant regarding a GHG emissions reduction target or goal, such as any strategy to increase energy efficiency, transition to lower carbon products, or purchase of carbon offsets or RECS.

It is critical for investors to have transparent and detailed information regarding a registrant’s RECs or carbon offsets in relation to its climate-related targets or goals because future goals and targets from a registrant can rest on speculative assumptions that may or may not be viewed as credible by investors. Investors must be able to ascertain if claimed approaches to ‘net zero’ or other corporate targets are robust, since whether those approaches actually lead to reduction in emissions and transformations away from fossil fuel or other carbon-intensive dependence will dramatically impact a registrant's transition risk profile.

Further, the Commission should require registrants to, at a minimum, include in their disclosures any assumptions about the feasibility, emissions reduction capability, costs, risks, and permanence of any carbon capture, utilization, storage, and removal technologies used to reduce or remove emissions within their operational and organizational boundaries.

One example of transition plan disclosure that the Commission should provide is any reliance on a nascent technology to achieve a significant portion of a registrant’s GHG reduction goals. By definition, nascent technologies have not yet been proven to be viable at a commercial scale, and thus heavy reliance on them is evidence of transition risk that would be of material importance to investors. Reliance on carbon capture, utilization, and storage (CCUS) is one strategy that warrants discussion by the Commission. To date, the feasibility of this nascent technology, and the risks of failure to bring it to commercial scale, have received little attention in disclosures by registrants. For example, Occidental Petroleum has claimed a recent shipment of its oil is ‘net zero,’³²⁹ presumably part of its publicity about progress toward its climate targets.³³⁰ The company has declared the shipment, in 2022, to be ‘net zero’ through the purchase of removal credits that it says will happen *in 2024*, after the planned direct air capture (DAC) facility of the carbon removal firm, 1PointFive, comes online.³³¹ The company claims that the emissions from this current shipment will some day in the future be neutralized by first capturing the carbon dioxide, then liquifying it and storing it underground in its own wells, to facilitate enhanced oil recovery (EOR) in its operations. No details about the cost of the DAC offsets, underground storage or EOR, or their effectiveness in reducing GHG emissions, are provided to investors.

Investors need information on which strategies to reduce transition risk rely on speculative approaches and which have made demonstrable progress toward climate targets. For example, where CCUS appears in plans, projections, or forward-looking statements, investors may view such claims with skepticism, as a large majority of CCUS projects have failed to reach projected capture rates, if the projects are ever completed at all.³³²

If the registrant sets its emissions baselines, targets, and reporting according to internal or external criteria (like an SBTi target), the Commission should require disclosure of those criteria.

³²⁹ Defined as created by combining crude oil together with environmental attributes generated from the sequestration of atmospheric carbon dioxide (CO₂) captured via 1PointFive’s planned large-scale Direct Air Capture (DAC) facility and sequestered in Occidental’s enhanced oil recovery (EOR) reservoirs in the U.S. Permian Basin. Oxy. 2022. “Occidental, SK Trading International sign first agreement for net-zero oil created from captured atmospheric carbon dioxide.” Press release, March 22, 2022. <https://www.oxy.com/news/news-releases/occidental-sk-trading-international-sign-first-agreement-for-net-zero-oil-created-from-captured-atmospheric-carbon-dioxide/>.

³³⁰ Oxy. N.d. “Climate Strategy and Net-Zero Transition.” Sustainability: Planet. Accessed May 13, 2022. <https://www.oxy.com/sustainability/planet/>.

³³¹ Oxy. 2022. “Occidental, SK Trading International sign first agreement for net-zero oil created from captured atmospheric carbon dioxide.” Press release, March 22, 2022. <https://www.oxy.com/news/news-releases/occidental-sk-trading-international-sign-first-agreement-for-net-zero-oil-created-from-captured-atmospheric-carbon-dioxide/>.

³³² Abdulla, Ahmed, et al. 2020. “Explaining Successful and Failed Investments in U.S. Carbon Capture and Storage Using Empirical and Expert Assessments.” *Environmental Research Letters* 16, no. 1 (December). <https://iopscience.iop.org/article/10.1088/1748-9326/abd19e>.

The SEC should require each registrant to discuss in Regulation S-K items 1502 2(c) and 1506 (d) its business strategy, financial planning, capital allocation, and outlook for meeting climate goals, targets, and related opportunities. For instance, if the registrant has already committed to the 5- to 10-year contract terms of the general corporate or sector specific SBTi, the registrant could include in its filings the annual SBTi review of its progress toward meeting its SBTi commitment when fulfilling its 1502 and 1506 obligations.

To assist registrants in complying with items 1502 and 1506 reporting, the Commission should provide a non-exhaustive list of examples, such as strategies and resources that companies, including SEC registrants, are using to achieve progress to set and realize their short-term and medium-term emissions reduction targets. If registrants refuse to set emissions reduction targets or are unable to comply with SEC requirements for climate disclosures, that information itself might be useful to investors.

171. Should we require a registrant, when disclosing its targets or goals, to disclose any data that indicates whether the registrant is making progress towards meeting the target and how such progress has been achieved, as proposed?

The Commission should require a registrant, when disclosing its targets or goals, to disclose any data that indicate whether the registrant is making progress toward meeting the target and how such progress has been achieved, as proposed.

This should include how a registrant's progress toward targets or goals links to the financial statements, because capital expenditures made by registrants in implementing transition plans are a key metric for investors.

172. Should we require that the disclosure be provided in any particular format, such as charts? Would certain formats help investors and others better assess these disclosures in the context of assessing the registrant's business and financial condition? What additional or other requirements would help in this regard?

The Commission should require that a registrant's disclosure of data that indicates whether the registrant is making progress toward meeting its targets or goals be provided in a consistent and standardized format across registrants, as set by the Commission, that prioritizes presenting the disclosures in a way that is visible, easily understood, and decision-useful for investors.

Data should be disclosed to investors both in raw data form and in graphs that indicate changes over time. It is reasonable for the Commission to issue guidance regarding the format of registrants' disclosures of data about progress toward targets or goals shortly after issuance of the final rule; such guidance need not be incorporated in this rule.

173. If a registrant has used carbon offsets or RECs, should we require the registrant to disclose the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECS, the source of the offsets or RECs, the nature and location of the underlying projects, any registries or other authentication of the offsets or RECs, and the cost of the offsets or RECs, as proposed? Are there other items of information about carbon offsets or RECs that we should specifically require to be disclosed when a registrant describes its targets or goals and the related use of offsets or RECs? Are there proposed items of information that we should exclude from the required disclosure about offsets and RECs?

The SEC should require information about the source of offsets and the nature of the underlying projects.

In addition to information already identified by the SEC, below are specific additional items that the SEC should require registrants to disclose regarding the offsets a registrant utilizes.

First, the SEC should require disclosure of the registry project ID, or if that is not available, sufficient information to identify the specific project from which offsets are sourced. In the case of pooled credit portfolios, registrants should disclose the pool from which credits are purchased. To support investors in identifying risky activity, disclosure should include if a registrant has purchased offsets from block-chain based technologies like cryptocurrencies, as discussed in the response to question 24.

Second, the SEC should require registrants to disclose the breakdown between avoided emissions and carbon removals used. Projects that involve emissions avoidance, reduction, and removal should be identified as "mixed". As described in the response to question 24, disclosure of the type of carbon credit used is critical when assessing both a registrant's progress toward its climate targets, and a registrant's transition risk profile. Further, this is already becoming a standard market practice. For example, two offset crediting mechanisms, American Carbon

Registry and the Architecture for REDD+ Transactions (ART-TREES),³³³ are each planning to annotate their issued credits with information on whether the credits are resulting from removals projects or reductions/avoided emissions projects, as is the Integrity Council on Scaling Voluntary Markets (IC-VCM),³³⁴ an offset credit rating organization under development that calls this added information ‘attributes’. As these attributes would be attached to credits in the IC-VCM model contract language, they would therefore be knowable and reportable by registrants.

Third, the SEC should require registrants to disclose the removal method utilized and the duration of offset contract used. As noted in response to question 24, different types of carbon credits face different risks of reversal or project failure. For example, forest carbon credits can be destroyed by wildfire, rendering their value worthless and requiring repurchase. To assist investors in assessing the risk of credit failure and the permanence of removal, registrants should disclose the removal method used (whether nature-based or technology-based), and the storage method (biological, geological, in products, or without storage). As with avoided emissions versus carbon removal, tagging of these attributes is already contemplated by the IC-VCM and should facilitate straightforward disclosure by registrants.³³⁵ The SEC should also require the disclosure of the duration of the offset contract utilized, and describe the transition risk planning assumptions that underpin the registrant’s decisions about the types of removal method to use.

Fourth, the SEC should require the disclosure of all credits retired in a fiscal year, and with an estimate of physical delivery of offset and REC derivatives contracts carried beyond the fiscal year into the rollover periods of the derivatives contracts. As described in response to question 24, it is often impossible for investors to ascertain whether a company has laid exclusive claim to the benefits of the carbon offset it uses. To remedy this, the SEC should require the specific disclosure of what credits a company has retired in each fiscal year, and for offsets sourced from

³³³ Architecture for REDD+ Transactions (ART). 2021. “TREES: The REDD+ Environmental Excellence Standard.” Accessed June 1, 2022. <https://www.artredd.org/trees/>. ART-TREES credits will be issued for removals, emissions reductions, and for ‘High Forest, Low Degradation’ areas where deforestation has not been significant. On this latter designation, see also the critique of providing offset credits for this type of (non)-activity: Streck, Charlotte, et al. 2022. “Comment: We Must Protect Intact Forests, but CORSIA Got It Wrong.” *Carbon Pulse*, April 14, 2022. <https://carbon-pulse.com/156727/>. “While it is essential for the world to protect forests that are not under immediate threat of deforestation, treating carbon credits from their conservation as fungible compliance instruments threatens to undermine carbon market integrity.”

³³⁴ Taskforce on Scaling Voluntary Carbon Markets (TSVCM). 2021. *Phase II Report*. Washington, DC: Institute of International Finance. https://www.iif.com/Portals/1/Files/TSVCM_Phase_2_Report.pdf. The proposed new credit would be differentiated as an avoidance/reduction credit or a removal credit. “Whether a CCP represents a ton of CO₂e avoided/reduced or removed is an integral characteristic of the CCP that must be labelled by Standards on all CCPs. Standards are expected to increasingly tag credits within a methodology into removal and avoidance/reduction. Where not possible, credits would automatically belong to the “avoidance/reduction or mixed” category.” [The CCP is the new carbon credit unit being defined by the TSVCM.]

³³⁵ Taskforce on Scaling Voluntary Carbon Markets (TSVCM). 2021. *Phase II Report*. Washington, DC: Institute of International Finance. https://www.iif.com/Portals/1/Files/TSVCM_Phase_2_Report.pdf, at 96.

derivatives, an estimate of physical delivery of offset and REC derivatives contracts carried beyond the fiscal year into the rollover periods of the derivatives contracts.

Fifth, the SEC should require the disclosure of how any external standards a company has signed on to address offsets and RECs. Such disclosure is germane to investors since different standards have specific criteria that companies must follow. For instance, for SBTi net-zero emissions reduction target setting, “The use of carbon credits must not be counted as emission reductions toward the progress of companies’ near-term science-based targets.”³³⁶ If a registrant is contractually following SBTi criteria, but is utilizing offsets inappropriately, investors may view that company’s actions as less credible.

Sixth, the SEC should require that companies disclose any due-diligence steps they have taken to ensure that offset or CCUS programs they participate in fully respect the land rights of local and Indigenous communities. This includes reporting on any and all land rights conflicts that may arise in any offset project that the registrant makes use to ensure adherence to land rights of local and Indigenous communities. This information will allow investors to more accurately assess potential legal, reputational, political, and social risks borne by companies when participating in offset programs.

Seventh, the SEC should require separate reporting of offsets and RECs sourced through derivative contracts. As described in the response to question 24, a registrant’s use of carbon offset derivatives presents unique financial risks, and should be reported separately.

Finally, for “cost” of offsets or RECs, the SEC should enumerate examples of what units of cost are appropriate to report. This should include cost per credit or cost per ton broken down according to whether the credits represent avoided emissions, removal, or mixed outcomes, and for any derivatives used registrants should report the gross notional value of these derivatives transactions for the fiscal year.

174. Should we apply the PSLRA statutory safe harbors as they currently exist to forward-looking statements involving climate-related targets and goals, or other climate-related forward- looking information? Should we instead create a separate safe harbor for forward-looking climate-related information, including targets and goals? Should we adopt an exception to the PSLRA statutory safe harbors that would extend the safe harbors to climate-related forward- looking disclosures made in an initial public offering registration statement?

³³⁶ Science Based Targets Initiative (SBTi). 2021. *SBTi Criteria and Recommendations*. SBTi. <https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf>, at 7.

The Commission should apply the PSLRA statutory safe harbors as they currently exist to forward-looking statements involving climate-related targets and goals, or other climate-related forward-looking information.

It is not necessary to create a separate safe harbor for forward-looking climate-related information, including targets and goals. For climate-related disclosure items that may largely be forward-looking, such as proposed Item 1506: Targets and goals, a registrant should be transparent about the aspects that are forward-looking. The registrant should not be protected by the PSLRA forward-looking statement safe harbor when disclosing historical and current data related to goal setting.

The Commission should not adopt an exception to the PSLRA statutory safe harbors that would extend the safe harbors to climate-related forward-looking disclosures made in an initial public offering registration statement. For the reasons discussed in question 1, climate risk is a financial risk and investors should not receive fewer protections from fraudulent disclosures during an initial public offering than they do as related to other risks.

175. Should the proposed climate-related disclosures be required in Exchange Act reports and registration statements, as proposed? Should we exempt SRCs from all of the proposed climate-related disclosure rules instead of exempting them solely from Scope 3 emissions disclosure requirements, as proposed? Should we exempt SRCs from certain other proposed climate-related disclosure requirements and, if so, which requirements? For example, in addition to the proposed exemption from Scope 3 emissions disclosure, should we exempt SRCs from the proposed requirement to disclose Scopes 1 and 2 emissions? Are there certain types of other registrants, such as EGCs or business development companies (“BDCs”), that should be excluded from all or some of the proposed climate-related disclosure rules?

The SEC should not exempt SRCs from any part of the climate-related disclosure rules, including the Scope 3 emissions disclosure, as discussed in the response to question 134.

176. Should we require foreign private issuers that report on Form 20-F to provide the same climate-related disclosures as Form 10-K filers, as proposed? Should we require climate-related disclosures in the registration statements available for foreign private issuers, as proposed? If not, how should the climate-related disclosures provided by foreign private issuer registrants differ from the disclosures provided by domestic registrants?

The Commission should require foreign private issuers that report on Form 20-F to provide the same climate-related disclosures as Form 10-K filers, as proposed.

Investors need information about climate-related risk from all participants in U.S. capital markets, regardless of their home jurisdiction. Climate change is a global phenomenon, but the specific impacts and transition activities will vary based on a registrant's location. By requiring comparable disclosures, the Commission helps investors access the disclosures they need for a wider range of companies, and reduces the incentive for firms to register in foreign jurisdictions with fewer investor protections while seeking to maintain access to U.S. capital markets via foreign private issuer status.

177. Should we require a registrant to disclose any material changes to the climate-related disclosure provided in its registration statement or annual report in its Form 10-Q or Form 6-K, as proposed? Are there any changes that should be required to be reported on Form 8-K?

The Commission should require a registrant to disclose any material changes to the climate-related disclosure provided in its registration statement or annual report in its Form 10-Q or Form 6-K, as proposed.

For the reasons discussed in the response to question 1, climate-related risks are financial risks and should be subject to the same disclosure requirements as other financial risks.

180. Should we require climate-related disclosure in Forms S-4 and F-4, as proposed? Should we provide transitional relief for recently acquired companies? For example, should we provide that a registrant would not be required to provide the proposed climate-related disclosures for a company that is a target of a proposed acquisition under Form S-4 or F-4 until the fiscal year following the year of the acquisition if the target company is not an Exchange Act reporting company and is not the subject of foreign climate-related disclosure requirements that are substantially similar to the Commission's proposed requirements? Should such transitional relief in this instance be for a longer period than one year and, if so, for how long should such transitional relief extend?

The Commission should require climate-related disclosure in Forms S-4 and F-4, as proposed.

For the reasons discussed in response to question 1, climate-related risks are financial risks and should be subject to the same disclosure requirements as other financial risks. Investors need information about a registrant's climate-related risks at every stage of capital formation. Including a discussion of the climate-related risks of both the registrant and the company being acquired will provide important insight in one place. Such information is particularly valuable for putting emissions from both companies in a single location, allowing investors to assess the level of transition risk the combined entity will incur. It will also help investors and other market

participants assess how the transition plans, targets, and metrics of an acquired company will fit with the registrant's plans.

182. The proposed rules would not apply to asset-backed issuers. The Commission and staff are continuing to evaluate climate-related disclosures with respect to asset-backed securities. Should we require asset-backed issuers to provide some or all of the disclosures under proposed Subpart 1500 of Regulation S-K? If so, which of the proposed disclosures should apply to asset-backed issuers? Are other types of climate disclosure better suited to asset-backed issuers? How can climate disclosure best be tailored to various asset classes?

The Commission should adopt climate-related disclosure requirements for asset-backed securities.

Asset-backed securities are subject to many of the same climate risks as others, and require similar disclosure. Climate change will affect different securitized pools of mortgages differently, for example, based on their location. There are growing concerns that institutions are not fully disclosing that properties within the asset pools that they securitize are located in areas particularly vulnerable to increased risk of sea-level rise and extreme flooding.³³⁷ Mortgage and auto loans are both highly sensitive to both the broader economic effects of the transition on a specific location, and to changing consumer tastes that may rapidly reduce the value of the pooled assets. The financial crisis of 2008-2009 revealed how securitized products, when bundled and traded without a clear indication of the integrity of those products, have the potential to harm investors and threaten the orderly functioning of capital markets. If risks are not fully disclosed, the asset may not be accurately priced. The Commission should learn this lesson and move quickly to require disclosures for asset-backed issuers similar to those that would be required in proposed Subpart 1500 of Regulation S-K.

184. If we adopt an alternative reporting provision, should we specify certain minimum standards that the alternative reporting regime must meet in order to be recognized and, if so, what standards? For example, should we specify that an alternative reporting regime must require the disclosure of a foreign private issuer's Scopes 1 and 2 emissions and related targets, the proposed financial statement metrics, as well as disclosures pursuant to the

³³⁷ See Charlie Wowk, Research Assistant, Climate Risk Disclosure Lab, "...the correlation of natural disaster risk across loans in a mortgage pool poses a substantial source of aggregate risk for holders of [mortgage backed securities] (MBS). The mispricing and poor disclosure standards also means that home buyers risk overpaying for properties that could be struck by an unexpected extreme weather event over the course of a 30-year mortgage." Wowk, Charlie. 2021. "Burning Down the House: How Inadequate Climate Risk Disclosures and Information Asymmetries Threaten to Disrupt the US Mortgage Market." Climate Risk Disclosure Lab, February 2021. <https://climatedisclosurelab.duke.edu/2021/02/burning-down-the-house-how-inadequate-climate-risk-disclosures-and-information-asymmetries-threaten-to-disrupt-the-u-s-mortgage-market/>.

TCFD’s recommendations regarding governance, strategy, and risk management disclosure? Should we specify that the alternative reporting regime must require the disclosure of Scope 3 emissions and, if so, should we deem the alternative reporting regime to be substantially similar even if its Scope 3 emissions requirements become effective after the Commission’s phase in period for Scope 3 emissions disclosure requirements? Should we specify that the alternative reporting regime must require the disclosure of scenario analysis if a registrant uses scenario analysis in formulating its strategy regarding climate-related risks? Are there certain climate-related disclosure requirements that have been adopted or are in the process of being adopted in other jurisdictions that we should consider to be substantially similar to the Commission’s rules for purposes of an alternative reporting provision? If so, which requirements should we consider?

If the Commission elects to adopt an alternative reporting regime, it should specify that the regime must include disclosure of a foreign private issuer’s Scopes 1, 2, and 3 emissions and related targets, financial statement metrics, and disclosures pursuant to the TCFD’s recommendations regarding governance, strategy, and risk management disclosure.

As discussed in the response to question 176, requiring consistent disclosure for all registrants who participate in U.S. capital markets, regardless of their home jurisdiction, will help protect investors and ensure the orderly functioning of capital markets. As discussed in this comment, each of the main sections of the proposal is necessary to achieve these objectives. For an alternative reporting regime to also meet these goals, it must include equivalents for each of the major elements of the Proposal. In particular, this means that investors must have visibility into the value-chain risks illuminated by Scope 3 emissions, along with the measures of transition risk provided by Scope 1 and 2 emissions.

189. An International Sustainability Standards Board (ISSB) has recently been created, which is expected to issue global sustainability standards, including climate-related disclosure standards.³³⁸ If we adopt an alternative reporting provision, should that provision be structured to encompass reports made pursuant to criteria developed by a global sustainability standards body, such as the ISSB? If so, should such alternative reporting be limited to foreign private issuers, or should we extend this option to all registrants? What conditions, if any, should we place on a registrant’s use of alternative reporting provisions based on the ISSB or a similar body?

The Commission should not structure an alternative reporting provision to encompass reports made pursuant to criteria developed by a global sustainability standards body, such as the ISSB.

³³⁸ 700 See supra note 92.

The standards issued by such bodies have not yet been developed, so it is unclear if they will require the full range of disclosures necessary to protect investors, including Scope 3 emissions. As those standards are finalized and incorporated into reporting regimes in other jurisdictions, the Commission should work with the ISSB and other securities regulators to develop harmonized disclosure standards that meet the needs of investors in U.S. capital markets. If standard setters like the ISSB elucidate additional useful information, the Commission may be able to incorporate it into existing requirements via guidance or other rulemaking. In evaluating whether to adopt an alternative reporting provision based on these standards, the Commission should also continue to be aware how the reporting standards in other jurisdictions incorporate considerations that may be inappropriate or inconsistent with the needs and desires of U.S. investors and the Commission's statutory authority and obligations.

190. Should we require registrants to tag the climate-related disclosures, including block text tagging and detail tagging of narrative and quantitative disclosures required by Subpart 1500 of Regulation S-K and Article 14 of Regulation S-X in Inline XBRL, as proposed? Should we permit custom tags for the climate-related disclosures?

The Commission should require the use of tagging and inline XBRL measures, as proposed.

Requiring these measures will serve investor needs by providing a standardized disclosure format, reducing costs, and improving their ability to compare information across registrants.

194. Should we treat the climate-related disclosures required by proposed subpart 1500 of Regulation S-K and proposed Article 14 of Regulation S-X as filed for purposes of potential liability under the Securities Act and Exchange Act, except for the climate disclosures on Form 6-K, as proposed? Should we instead treat the climate-related disclosures required by both proposed subpart 1500 of Regulation S-K and proposed Article 14 of Regulation S-X as furnished? Are there reasons why the proposed climate-related disclosures should not be subject to Section 18 liability?

The Commission should treat climate-related disclosures required by both proposed subpart 1500 of Regulation S-K and proposed Article 14 of Regulation S-X as filed, except for the climate disclosures on Form 6-K.

As stated in earlier responses, it is important to include climate-related disclosure in Regulation S-K and Regulation S-X, as proposed; climate disclosures should be treated consistently with other disclosures that are filed under these regulations.

The proposed climate-related financial information is necessary to understand a registrant’s financial condition and must be treated accordingly. Allowing climate-related information to be furnished separately (or “furnished” within otherwise “filed” documents) would subordinate it relative to other core business information and incorrectly suggest that it is supplemental or ancillary. Therefore, the disclosures must be filed alongside other information of a similar nature and purpose such as the other information required to be filed under Regulations S-K and S-X.

Treating the disclosures as filed best responds to investor demands for more reliable climate-related information and provides necessary investor protection. Climate-related disclosures will serve to protect investors from the concrete risks presented by climate change that are currently underreported. A large number of investors have commented to the SEC acknowledging these underreported risks and requesting action by the Commission to facilitate more accurate and reliable disclosures from registrants.³³⁹

Climate-related disclosures will provide information that is important for investors in securities analysis and the management of investment risk, as the comments from numerous investor groups have demonstrated.³⁴⁰ Therefore, these disclosures should be treated the same as other critical information filed under Regulations S-X and S-K that has been proven material and necessary for investors’ assessment of registrants’ financial performance and future prospects. Investors should have all the traditional tools that the Exchange Act provides—including Section 18 liability—when issuers provide false material information that harms investors. Lowering the status of the required information from “filed” to “furnished” would deprive investors of certain causes of action normally available to seek redress for misstatements in filed annual reports that cause them harm. It would also undermine investor confidence in the disclosures overall.

The right of private action afforded by “filing” the required disclosures would both provide remedies for investors and incentivize better due diligence for the information disclosed. Such remedies and the Commission’s ability to use them in anti-fraud enforcement actions will produce disclosures that are more reliable than voluntary disclosures. Conversely, allowing registrants to furnish climate-related disclosures would reduce the reliability of the disclosures and the benefits of the proposed disclosure mandate. This matters because company’s often misreport and underreport climate risks. Several studies and analyses have found that climate risks are underreported across the entire market and at the individual firm level.³⁴¹ Based on this evidence, the Commission would be prudent to afford the disclosures with treatment necessary to ensure the highest levels of due diligence. Any concerns about registrants’ potential inability to

³³⁹ Duke Global Financial Markets Center, “Summary of Comment Letters for the SEC’s Climate Risk Disclosure RFI,” 2021.

<https://climatedisclosurelab.duke.edu/2021/07/summary-of-comment-letters-for-the-secs-climate-risk-disclosure-rfi/>

³⁴⁰ *Ibid.*

³⁴¹ Carbon Tracker Initiative. 2021. *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting*. London: Carbon Tracker Initiative.

<https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

meet disclosure requirements are best addressed through guidance rather than by reducing investor protections.

As discussed in response to questions 4 and 98, limiting enforceability of disclosure obligations not only reduces investor protections; it also undercuts the Commission’s mandate to preserve fair, orderly, and efficient markets by sending a signal to recalcitrant registrants that there is little risk surrounding a decision not to disclose material information or to misrepresent climate-related information.

195. Should we only treat the climate-related disclosures required by proposed subpart 1500 of Regulation S-K as filed? Should we only treat the climate-related disclosures required by proposed Article 14 of Regulation S-X as filed? Is there some other subset of climate-related disclosures that should be treated as furnished rather than filed? For example, should we only treat as filed disclosures related to a registrant’s Scopes 1 and 2 emissions, and treat a registrant’s Scope 3 emissions as furnished?

For the reasons discussed in response to question 194, the Commission should treat all climate-related disclosures as filed.

197. Should we provide different compliance dates for large accelerated filers, accelerated filers, non-accelerated filers, or SRCs, as proposed? Should any of the proposed compliance dates in the table above be earlier or later? Should any of the compliance dates be earlier so that, for example, a registrant would be required to comply with the Commission’s climate-related disclosure rules for the fiscal year in which the rules become effective?

The Commission should provide different compliance dates for different types of filers, and include accelerated timelines for disclosure as outlined in the introduction to this comment and reproduced here.

Large Accelerated Filers	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2023	FY 2023	FY 2023*
<i>Limited Assurance</i>	–	FY 2024	FY 2024*
<i>Reasonable Assurance</i>	–	FY 2025*	FY 2025*

Accelerated Filers and Non-Accelerated Filers	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2024	FY 2024	FY 2024*
<i>Limited Assurance</i>	–	FY 2025	FY 2025*
<i>Reasonable Assurance</i>	–	FY 2026*	FY 2026*

Small Reporting Companies (SRCs)	<i>All proposed disclosures except GHG emissions</i>	<i>Scope 1, Scope 2 GHG emissions and intensity</i>	<i>Scope 3 GHG emissions and intensity</i>
<i>Disclosure</i>	FY 2025	FY 2025	FY 2026*
<i>Limited Assurance</i>	–	FY 2026*	FY 2027*
<i>Reasonable Assurance</i>	–	FY 2027*	FY 2028*

198. Should we provide a compliance date for the proposed Scope 3 emissions disclosure requirements that is one year later than for the other disclosure requirements, as proposed? Should the compliance dates for the Scope 3 emissions disclosure requirements be earlier or later? Should the compliance date for the Scope 3 emissions disclosure requirements depend upon whether the registrant is a large accelerated filer, accelerated filer, or non-accelerated filer?

With the exception of SRCs, the Commission should set the compliance dates for its Scope 3 disclosure mandate in the same year as for Scope 1 and 2 disclosures, as outlined in the response to question 197.

Cost-Benefit Analysis Response

The Commission’s Economic Analysis Satisfies Relevant Legal Requirements

The Proposal’s economic analysis of the rule’s anticipated impact on the capital markets and society rests on a solid economic justification and inarguably meets the Commission’s legal requirements to consider certain economic factors. The SEC has accounted for a host of estimated costs and benefits, including direct and indirect impacts. It assesses the competitive burdens of the rule, develops an appropriate economic baseline, and considers reasonable alternatives. In the final rule, the SEC should use any additional information gathered as part of this comment period to better monetize any costs and benefits it has assessed qualitatively, explain more thoroughly why some costs and benefits cannot or should not be monetized, and use the ample evidence in its economic analysis to conclude that mandating Scope 3 emissions reporting for all registrants provides higher net benefits justifying any additional costs to registrants.

The Commission’s existing guidance on economic analysis sets forth the analytical approach drafters should use when writing a rule.³⁴² That approach, informed primarily by the executive orders and guidance documents that govern cost-benefit analysis at executive agencies and motivated by court decisions reviewing the sufficiency of the economic analysis in major SEC rules, recommends a thorough consideration of the need for the rulemaking, a well-articulated economic baseline, reasonable alternatives to the rule, and an assessment of economic impact that may include qualitative and quantitative benefits and costs.

The SEC’s obligation, as articulated by the D.C. Circuit in *Chamber of Commerce v. SEC*, is to “conduct . . . a general analysis based on informed conjecture.”³⁴³ The agency “need not—indeed cannot—base its every action upon empirical data.”³⁴⁴ Furthermore, as articulated in *Business Roundtable v. SEC*, the SEC is obligated to consistently and fairly frame the costs and benefits of the rule; adequately quantify the certain costs or explain why they cannot be quantified; support its predictive judgments; not contradict itself; and respond to substantial problems raised by commenters.³⁴⁵ Finally, *American Equity Life Insurance Co. v. SEC* reiterates that “for every rulemaking in which the SEC ‘is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to

³⁴² Securities and Exchange Commission (SEC). 2012. “Current Guidance on Economic Analysis in SEC Rulemakings.” Memorandum, March 16, 2012.

https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

³⁴³ *Chamber of Commerce v. SEC*, 412 F.3d 133, 142 (D.C. Cir. 2005) (quoting *Melcher v. FCC*, 134 F.3d 1143, 1158 (D.C. Cir. 1998)).

³⁴⁴ *Id.*

³⁴⁵ *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148-49 (D.C. Cir. 2011).

the protection of investors, whether the action will promote efficiency, competition, and capital formation.”³⁴⁶

The SEC is responsive to its own analytical framework and governing case law in the Proposal, especially in considering the costs and benefits of the climate disclosure rule. The economic analysis necessarily emphasizes the qualitative and non-quantifiable elements of the climate risk disclosure. The final rule’s economic analysis ought to build on the proposal’s foundation.

The Proposal Adequately Considers Costs and Benefits

The SEC has duly satisfied formal cost-benefit principles by monetizing costs where possible and describing the non-quantifiable benefits it anticipates will flow from the Proposal. To strengthen the analysis, the Commission should provide additional support for predictive judgments, elaborate on the limits of monetization, and emphasize that though the benefits cannot always be quantified, they are vast in relation to the costs.

There is no strict statutory requirement that the SEC conduct a formal economic cost-benefit analysis in promulgating its rules. However, the SEC must satisfy various statutory obligations and be sensitive to judicial interpretations of the law that require consideration of economic factors in compiling a durable administrative record.³⁴⁷ The prevailing formal cost-benefit analysis framework involves an effort to monetize costs and benefits where practicable and to consider them.³⁴⁸ The Proposal does this by detailing the likely costs and benefits, including a qualitative and quantitative assessment of both direct and indirect effects. The SEC should incorporate any additional data gathered via comments into its thorough exploration of the costs that companies may face while also elaborating on private-sector cost savings that could be generated from a disclosure rule. Where it is not practicable to monetize a significant anticipated cost or benefit, the SEC should note that and explain how the agency reached that conclusion.

The analysis of direct costs to companies, centered on compliance costs, is related to the Commission’s statutory responsibilities to estimate paperwork burden of the rule amendments

³⁴⁶ *American Equity Life Ins. Co. v. SEC*, 613 F.3d 166, 176-77 (D.C. Cir. 2010) (quoting Section 2(b) of the Securities Act, 15 U.S.C. § 77b(b)).

³⁴⁷ Section 2(b) of the Securities Act, 15 U.S.C. 77b(b), and Section 3(f) of the Exchange Act, 17 U.S.C. 78c(f), require the Commission, when engaging in rulemaking where it is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. Further, Section 23(a)(2) of the Exchange Act, 17 U.S.C. 78w(a)(2), requires the Commission, when making rules under the Exchange Act, to consider the impact that the rules would have on competition, and prohibits the Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the Exchange Act.

³⁴⁸ Securities and Exchange Commission (SEC). 2012. “Current Guidance on Economic Analysis in SEC Rulemakings.” Memorandum, March 16, 2012.

https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_seculemaking.pdf.

under the Paperwork Reduction Act (PRA).³⁴⁹ The accounting tables in Section V not only fulfill the Commission’s PRA obligations but also demonstrate its thorough attention to the likely economic effects of the rule.

To further strengthen the analysis, the Proposal should provide a full explanation of the limits of monetization. The Proposal rightly says, for instance, that cost estimates specific to emissions could not be “fully and accurately” quantified.³⁵⁰ The Proposal then reviews commenter input and cost estimates related to the Environmental Protection Agency (EPA) mandatory GHG reporting program. The final rule should build on further information gathered in the comment period in order to “quantify the certain costs or ... explain why those costs could not be quantified.”³⁵¹

The SEC’s argument that compliance costs will decline over time is highly reasonable and logical.³⁵² It is well positioned to reach these conclusions because of its long experience with administering other disclosure rules and frameworks related to financial risk.

The economic analysis correctly acknowledges indirect costs, even those that are not likely to have a major impact.³⁵³ The Commission mentions litigation risk and disclosure of proprietary information as potential indirect costs for certain firms. The Commission is not required to monetize these potential costs in the final rule; it may instead choose to explain why monetization is impractical and these costs are too speculative, and provide a qualitative discussion of their impacts.

The Proposal also outlines the significant benefits of a uniform mandatory climate risk disclosure regime. Much of the criticism of the Commission’s economic cost-benefit analysis overemphasizes costs relative to benefits because of the asymmetrical nature of compliance costs compared to qualitative descriptions of benefits.³⁵⁴ The case law and guidance documents do not provide added weight to costs or benefits just because they can be quantified. The Commission should emphasize that the scale of the qualitative benefits to investors and other market participants is readily apparent and vast in comparison to costs. The central benefit of the rule is

³⁴⁹ Proposal at 21452, section V.

³⁵⁰ Proposal at 21441.

³⁵¹ 647 F.3d at 1148-49.

³⁵² Proposal at 21439. “These costs are expected to decrease over time for various reasons, including increased institutional knowledge, operational efficiency, and competition within the market for relevant services.”

³⁵³ Proposal at 21443, section C.2.b.

³⁵⁴ “Many agencies issue regulations that provide identifiable and tangible benefits to the public, yet because of methodological limitations inherent in regulatory cost-benefit analysis, such benefits cannot be quantified. In short, regulatory cost-benefit analysis is generally a poor and unreliable metric for assessing the impacts of regulations, particularly on consumers.” Narang, Amit. 2020. “Written Statement of Amit Narang, Regulatory Policy Advocate, Public Citizen, CFPB Symposium on Cost-Benefit Analysis.” Public Citizen, July 29, 2020.

https://files.consumerfinance.gov/f/documents/cfpb_narang_written-statement_symposium-cost-benefit-analysis.pdf

that investors would have access to “comparable, consistent, and reliable disclosures with respect to registrants’ climate-related risks.”³⁵⁵ In other words, the rule’s principal effect will be to vastly improve the information available to investors about a set of economic risks that are already some of the most significant in making investment decisions and are rapidly growing in importance. The removal of barriers to public access to pertinent investment information will have vast economic benefits that are, despite their enormity and significance, difficult to quantify, and will have extraordinarily significant qualitative benefits as well.

The rule will benefit investors by providing “valuable insights” into firms’ likely revenue and cost disruptions, supply chain risks, physical risks and increased costs, as well as risks to whole sectors, markets, and the economy writ large.³⁵⁶ In addition, although valuable insights and increased investor confidence are impracticable to monetize, investors and the public have demonstrated that they are highly valuable by expending significant expense to develop and advance voluntary disclosure frameworks to improve the availability and comparability of this information. The same demonstrated importance exists for the benefit of a convenient, centralized location of climate disclosures in regulatory filings. It will have a clear, strong benefit for market participants, even if that benefit cannot easily be expressed as an accounting figure.

Importantly, the Proposal requires the disclosure of GHG emissions for certain firms. This is essential to give market participants a better sense of investment risk for those firms and for whole sectors, markets, and the broader economy. It is not practicable to quantify the benefit of risk reduction in an extremely uncertain market environment over the course of years; there are simply too many factors at play. The Commission has done the next best thing in fully describing the anticipated normative effects and incentives based on the proposed framework.³⁵⁷

Other significant benefits that are necessarily qualitatively outlined in the Proposal include the ability to monitor a firm’s progress in meeting stated climate goals, reduced search costs and improved processing efficiency, and better public understanding of an organization’s business strategy.³⁵⁸

The disclosure of all Scope 3 emissions is justified based on the benefits it would create for investors and markets, compared to the costs. As discussed in the response to question 93, Scope 3 emissions often make up the greatest proportion of a registrant’s total emissions, yet largely go

³⁵⁵ Proposal at 21429.

³⁵⁶ Proposal at 21433. “Such disclosures are expected to provide investors with valuable insights into potential changes to, among others, revenue or costs from disruptions to business operations or supply chains; impairment charges and changes to the carrying amount of assets due to the assets being exposed to physical risks; revenue or cost due to new emissions pricing or regulations resulting in the loss of a sales contract and; operating, investing, or financing cash flow from changes in upstream costs, such as transportation of raw materials.”

³⁵⁷ Proposal at 21437, section IV.C.1.g.

³⁵⁸ Proposal at 21438, section C.1.h. Climate disclosures in the data language (Inline XBRL) already in use for public company financial statements.

unreported. The benefits that investors get from emissions disclosure, allowing them to make informed investment and voting decisions, would be increased by giving them the full picture of a registrant's climate-related risks, including Scope 3 emissions.³⁵⁹ Many investors already view a company's Scope 3 and other emissions data as a useful proxy for financial performance. Furthermore, as discussed in the response to question 100, companies are already disclosing Scope 3 emissions without undue burden. As Scope 3 disclosure requirements are required by non-U.S. regulators, such as in Canada and the EU, the availability of this information will only grow and the difficulty of obtaining emissions data from an internationally integrated value chain will only diminish. As discussed in the response to question 98, the Commission has set up guard rails to ensure that registrants can provide reasonable estimates when a more precise accounting would be an undue burden, limiting the costs any registrant will face. For that reason, the Commission should review and adopt a cost-benefit analysis that recognizes and reflects the ample net benefits, qualitative and quantitative, of mandating the disclosure of Scope 3 emissions for all registrants.

The Proposal Anticipates Effects on Efficiency, Competition, and Capital Formation

The SEC's guidelines stress the need to assess effects of a rule on efficiency, competition, and capital formation.³⁶⁰ The Proposal achieves that objective by assessing available empirical research and examples on relevant topics including market efficiency, systemic risks, and reduction in information asymmetries between market participants. As is the case with the evaluation of benefits, the anticipated effects of the rule on the market are properly understood in the context of the "complexity, uncertainty, and long-term nature of climate risks."³⁶¹

Not only does the Commission cite empirical research to support the Proposal, but it also takes into account the limitations of those studies. That approach is consistent with SEC rule writing guidelines.³⁶² The Proposal identifies support for the premise that inefficient markets are rife with misallocated risk and the climate disclosure rule would improve efficiency by "enabling climate-related information to be more fully incorporated into asset prices."³⁶³ The Commission goes on to explain the unpredictable nature of investor response to disclosures, addresses research contrary to its assertion, and explains why it chose to discount aspects of those

³⁵⁹ See Proposal at 21434.

³⁶⁰ Securities and Exchange Commission (SEC). 2012. "Current Guidance on Economic Analysis in SEC Rulemakings." Memorandum, March 16, 2012.

https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

³⁶¹ Proposal at 21445.

³⁶² "To the extent that the economic analysis includes predictive judgments, it should provide support for those judgments ... To the extent that the staff believes that a study or comment should be discounted, the release should explain why and cite available evidence supporting that position." Securities and Exchange Commission (SEC). 2012. "Current Guidance on Economic Analysis in SEC Rulemakings." Memorandum, March 16, 2012.

https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

³⁶³ Id.

studies.³⁶⁴ To the extent that the final rule considers empirical evidence and research submitted by the public, the Commission should continue to analyze information in this fashion. The SEC has a distinct statutory responsibility to consider a potential rule's effect on competition and is prohibited from promulgating rules that would unnecessarily burden competitive markets.³⁶⁵ The Proposal demonstrates that the disclosure rule would improve competition. The benefits to competition are ingrained in the Proposal's analysis and are a central element of its purpose. A climate risk disclosure rule will improve overall market competition and "level the playing field among firms, making it easier for investors to assess the climate-related risks of a registrant against those of its competitors."³⁶⁶

The Commission also highlights an important consideration for competition analysis: the global state of climate risk disclosure. U.S. companies competing in the global market are at risk of falling behind foreign counterparts, "failure to implement the proposed rules could lead to an informational gap between U.S. registrants and companies operating in foreign jurisdictions which require climate-related disclosures."³⁶⁷ The proposed disclosure regime inherently improves competition by addressing the anticompetitive conditions currently putting U.S. organizations at a disadvantage.

The Proposal addresses another competitive burden: the gap between companies taking their existing climate-related disclosure obligations seriously and those that do not provide any useful information. Under the current regulatory framework, some of the Commission's existing requirements may elicit disclosure about climate-related risks, but the nature and extent of the information provided through these disclosures is dependent on the discretion of management.³⁶⁸ As long as some managers are free to minimize the extent of these risks, it creates a disincentive for others to provide a full accounting. The current fragmented approach reveals why standardization of climate-related disclosures for registrants is essential. By requiring standard disclosures, including Scope 1, 2, and 3 emissions for all registrants, the Commission lets investors see the full spectrum of a company's climate-related risks. That will help level the playing field for firms that are meeting their existing disclosure requirements.

The Commission also analyzes how potential anticompetitive burdens of the rule are mitigated by the broad applicability of the disclosure requirements for public companies, rather than focusing on specific sectors, and the reference to the established GHG framework for reporting. Broad Scope 3 disclosure requirements will further level the playing field by, as the Commission states, allowing "investors to directly assess the efficiency of the registrant's operations and

³⁶⁴ Proposal at 21445, footnote 967.

³⁶⁵ Section 23(a)(2) of the Exchange Act, 17 U.S.C. 78w(a)(2).

³⁶⁶ Proposal at 21446.

³⁶⁷ Proposal at 21446.

³⁶⁸ Proposal at 21426.

compare across different industries and firms of varying size.”³⁶⁹ The Proposal is responsive to concerns about anticompetitive outcomes by making the disclosure of climate-related opportunities optional, to allow registrants to protect sensitive business information.³⁷⁰ The final rule should similarly respond to any anti-competitive concerns raised by commenters in response to the Proposal.

Finally, the Proposal does not neglect anticipated effects of the climate disclosure rule on capital formation.³⁷¹ Improved liquidity, lower costs of capital and higher asset prices are part and parcel with standardized, reliable disclosures across the market.

The Proposal Articulates an Economic Baseline, Evaluates Numerous Reasonable Alternatives

A defined baseline is an essential part of any credible economic analysis. To evaluate a rule’s impact, regulators must accurately describe the world without the proposed regulation.³⁷² The Proposal defines the contours of the climate risk disclosure today: including an assessment of affected parties, existing frameworks and laws, and market practices.³⁷³

A crucial aspect of the Proposal’s definition of the economic baseline is the attention to increasing voluntary disclosures and mandatory reporting requirements by U.S. states and foreign regulators. The document is replete with references and analysis of existing voluntary disclosure frameworks. This analysis discredits any claims that the Commission is creating a burdensome new set of requirements, as opposed to standardizing, simplifying, and streamlining a set of disclosures that markets are increasingly demanding already. Setting the baseline this way creates a more reasonable set of cost estimates for disclosures.

The Proposal could be strengthened by adding another element to the Commission’s baseline: the costs of proper compliance with existing SEC disclosure requirements. As discussed throughout the comment, firms today are failing to meet the requirements identified by accounting standard setters, and are not taking seriously the materiality analysis prescribed by the 2010 Guidance. The recent set of enforcement actions taken by the Commission is likely to start bringing the market norms for what is disclosed in line with existing law, increasing the level of disclosure by many registrants regardless of this Proposal’s effects.³⁷⁴ The Commission should use as the

³⁶⁹ Proposal at 21434.

³⁷⁰ Proposal at 21467.

³⁷¹ Proposal Section at 21447, Section IV.D.3.

³⁷² Environmental Protection Agency (EPA). 2010. “Guidelines for Preparing Economic Analyses: Baseline (Chapter 5).” EPA, December 2010. <https://www.epa.gov/sites/default/files/2017-09/documents/ee-0568-05.pdf>.

³⁷³ Proposal at 21413, Section IV.A.

³⁷⁴ Securities and Exchange Commission (SEC). 2022. “Spotlight on Enforcement Task Force Focused on Climate and ESG Issues.” Updated May 26, 2022. <https://www.sec.gov/spotlight/enforcement-task-force-focused-climate-esg-issues>.

baseline the expectations laid out in those actions, not the current practice of underreporting climate-related risks.

In assessing reasonable alternatives to the Proposal, the Commission considers at least fourteen possible changes to the climate disclosure rule.³⁷⁵ The Commission does the work of evenhandedly assessing the viability of those alternatives in the context of the rule's purpose and being transparent about its reasoning. For example, the Commission acknowledges the possibility of allowing GHG emissions disclosures to be considered furnished, rather than filed, under the Exchange Act. That alternative may reduce an organization's liability but would also impact Scope 3 emissions disclosures and ultimately lead to a market-wide perception that disclosures are less reliable. Since reliability is an essential component of the Proposal, the Commission appropriately rejected the alternative.³⁷⁶

³⁷⁵ Proposal at 21448, Section IV.F.

³⁷⁶ Proposal at 21449.

GLOSSARY

AICPA	American Institute of Certified Public Accountants
ASB	Auditing Standards Board
BDC	Business Development Companies
CCUS	Carbon Capture, Utilization, and Storage
CEQA	California Environmental Quality Act
CSR	Corporate Social Responsibility
DAC	Direct Air Capture
EDGAR System	Electronic Data Gathering, Analysis & Retrieval System
EGC	Emerging Growth Companies
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency
ESG	Environmental, Social & Governance
FASB	Financial Accounting Standards Board
FPI	Foreign Private Investor
GAAP	Generally Accepted Accounting Principles
GFANZ	Glasgow Financial Alliance for Net Zero
GHG Protocol	Greenhouse Gas Protocol
GWP	Global Warming Potential
IASB	International Accounting Standards Board
IAASB	International Auditing and Assurance Standards Board
IC-VCM	Integrity Council on Voluntary Carbon Markets

ICFR	International Controls over Financial Reporting
IEA	International Energy Agency
IFRS Foundation	The International Financial Reporting Standards Foundation
IPCC	Intergovernmental Panel on Climate Change
ISA	International Society of Automation
ISSB	International Sustainability Standards Board
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NO _x ((NO and NO ₂))	Nitrogen oxides
NZAOA	Net-Zero Asset Owners Alliance
PCAF	Partnership for Carbon Accounting Financials
PCAOB	Public Company Accounting Oversight Board
PPE Emissions	Plant, Property, And Equipment Emissions
PSLRA	Private Securities Litigation Reform Act
RECs	Renewable Energy Credits
SAB	Staff Accounting Bulletin
SASB	Sustainability Accounting Standards Board
SBTi	Science-Based Targets Initiative
SRCs	Small Reporting Companies
TCFD	The Task Force on Climate-Related Financial Disclosures
TSVCM	Task Force on Scaling Voluntary Carbon Markets
UNPRI	United Nations Principles for Responsible Investment
XBRL	eXtensible Business Reporting Language